



European
Commission



SUPPORTING MENTAL HEALTH OF HEALTH WORKFORCE AND OTHER ESSENTIAL WORKERS

**Opinion of the
Expert Panel on effective ways
of investing in Health (EXPH)**

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EXPERT PANEL ON EFFECTIVE WAYS OF INVESTING IN HEALTH

(EXPH)

Opinion on

Supporting mental health of health workforce and other essential workers

The EXPH adopted this opinion at the 8th plenary on 23 June 2021
after public hearing on 8 June 2021

About the Expert Panel on effective ways of investing in Health (EXPH)

Sound and timely scientific advice is an essential requirement for the Commission to pursue modern, responsive and sustainable health systems. To this end, the Commission has set up a multidisciplinary and independent Expert Panel which provides advice on effective ways of investing in health ([Commission Decision 2012/C 198/06](#)).

The core element of the Expert Panel's mission is to provide the Commission with sound and independent advice in the form of opinions in response to questions (mandates) submitted by the Commission on matters related to health care modernisation, responsiveness, and sustainability. The advice does not bind the Commission.

The areas of competence of the Expert Panel include, and are not limited to, primary care, hospital care, pharmaceuticals, research and development, prevention and promotion, links with the social protection sector, cross-border issues, system financing, information systems and patient registers, health inequalities, etc.

Expert Panel members

De Maeseneer Jan (Chair), De Oliveira Martins Pita Barros Pedro, Garcia-Altes Anna (Vice-Chair), Gruson Damien, Kringos-Pereira Martins Dionne, Lehtonen Lasse, Lionis Christos, McKee Martin, Murauskiene Liubove, Nuti Sabina, Rogers Heather-Lynn, Siciliani Luigi, Wiczorowska-Tobis Katarzyna, Zacharov Sergej, Zaletel Jelka

Contact

European Commission
DG Health & Food Safety
Directorate B: Health Systems, medical products and innovation
Unit B1 – Performance of national health systems
Office: B232 B-1049 Brussels

SANTE-EXPERT-PANEL@ec.europa.eu

The opinions of the Expert Panel present the views of the independent scientists who are members of the Expert Panel. They do not necessarily reflect the views of the European Commission nor its services. The opinions are published by the European Union in their original language only.

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The members of the Drafting Group are:

Expert Panel members

Professor Pedro Pita Barros	Chair
Dr Heather-Lynn Rogers	Rapporteur
Dr Jelka Zaletel	Rapporteur
Professor Jan De Maeseneer	
Dr Anna Garcia-Altes	
Dr Dionne Kringos	
Professor Christos Lionis	
Professor Martin McKee	
Dr Liubove Murauskiene	
Professor Luigi Siciliani	
Professor Katarzyna Wieczorowska-Tobis	
Dr Sergej Zacharov	

The declarations of the Drafting Group members are available at:

<https://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=2847>

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Dr Jenny Blythe, NIHR ARC North Thames Doctoral Fellow
Dr Victoria Kirkby, London School of Hygiene and Tropical Medicine
Mr Diogo Marques, Nova University of Lisbon
Professor Céu Mateus, Lancaster University
Dr Elena Petelos, University of Crete and Maastricht University, who provided valuable contributions to this Opinion.

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ABSTRACT

Essential workers, including the health workforce, were under increased stress and mental health risks in addition to infection risk during the COVID-19 pandemic. Aggravated levels of psychological distress ought to be recognised as a public health priority, and solutions are needed to address the consequences so that the potential current mental health conditions do not become disabilities. Therefore, the Expert Panel on effective ways of investing in health (EXPH) was requested by the European Commission to provide an opinion on supporting the mental health of the health workforce and of other essential workers.

The Opinion identifies the specific factors influencing the mental health of the health workforce and of other essential workers. It describes the evidence on effective and/or promising interventions, and provides evidence on cost-effectiveness, where available. Due consideration was given to providing for the needs of those with pre-existing mental health issues. The characteristics of those interventions are described, elaborating on the necessary preconditions to ensure the efficient delivery of these interventions in an effective, cost-effective, affordable and inclusive manner, across settings and jurisdictions. On the basis of this evidence, recommendations and action points were developed, emphasising the importance of involving both EU and national policy makers alike, raising awareness and engaging senior managers in sectors with a high share of essential workers, and, potentiating the role of mental health and occupational health practitioners in supporting the mental health of workers.

Mental health, defined as lack of mental illness and high levels of mental wellbeing, is influenced by a complex interplay of determinants. At work, occupation-specific determinants of mental health interact with non-occupational-specific characteristics. A conceptual framework was developed to represent the state of mental health, determinants / factors, and possible mental health trajectories over time in the face of a given stressor. The conceptual framework illustrates the potential impact of primary, secondary and tertiary prevention interventions occurring at different levels. These include: the health and social/community care sectors, workplace-level interventions (such as occupational health programmes and managerial-level changes), and economic/social policy measures. Mental health of essential workers can therefore be supported by interventions enacted within and outside of the health sector at primary, secondary, and tertiary prevention levels. Interventions in multiple settings at various levels can work synergistically to address a wide range of risk factors and potentiate a wide range of protective factors. The Swiss cheese model of accident causation is a helpful heuristic to illustrate this synergy. This model demonstrates the need for multiple interventions targeting multiple risk and protective factors occurring at multiple levels to ensure that all individuals benefit from them and no one individual is left behind. It suggests the priorities of different levels of interventions, from large scale interventions supporting the largest share of essential workers, to the interventions targeting organisational and team characteristics, job characteristics and lastly targeting modifiable individual characteristics. Specifically, post-traumatic stress disorder, burnout and moral injury are associated with working in stressful conditions, and could be anticipated and prevented in the workplace, or addressed when present.

Based on available evidence and identified limitations, gaps and challenges, eight recommendations with several action points are developed: change focus to mental wellbeing; treat mental wellbeing as an inherent part of the workplace and its organisation; create a supportive environment at EU-level; create an appropriate cost-effectiveness methodology; build and share knowledge on interventions; have a common EU-wide view of mental health care; prepare organisations and their leaders to address mental wellbeing of workers; and provide timely and adequate access to care when preventive efforts are not effective.

Keywords: Expert Panel on effective ways of investing in Health, mental health, wellbeing, healthcare workers, essential workers, risk factors, interventions, implementation, delivery conditions

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EXECUTIVE SUMMARY

During the COVID-19 pandemic, the health workforce and other essential workers faced a high risk of becoming infected whilst experiencing high levels of stress and being at risk from other threats to their mental health. Multiple contributing factors such as anxiety (including, risk of infection) and exceptionally high workload, often led to burnout. This increased burden of psychological distress ought to be recognised as a public health priority. Interventions to immediately support the mental health and alleviate the consequences of stress, fear, and moral injury are urgently required. These actions are needed to adequately address the major threat to the long-term mental health of large numbers of essential workers and to the sustainability of the health workforce and of health systems. Enhanced emotional and social support is critical to protect from long-term disability, particularly given the sustained effect of system pressure on people and health systems due to COVID-19.

In this Opinion, we identify factors influencing the mental health of the health workforce and of other essential workers and examine effectiveness and, where available, cost-effectiveness of promising interventions. We set out the characteristics of interventions that could be effective, including for people who have pre-existing mental health conditions and we discuss their cost-effectiveness, affordability, and inclusive delivery.

The World Health Organisation (WHO) defines mental health as "*a state of mental wellbeing in which people cope well with the many stresses of life, can realize their own potential, can function productively and fruitfully, and are able to contribute to their communities*". Optimal mental health involves the absence of mental illness and a high level of mental wellbeing. Existing research has focused more on the mental illness rather than on the mental wellbeing. Our understanding on mental illness and mental health lags far behind our understanding of physical health, particularly given the lack of definitive biological markers and diagnostic challenges. Mental illness is often associated with stigma, a critical barrier in itself determining health-seeking behaviour and, ultimately, access to care. Mental health is influenced by risk and protective factors both within and around the individual. Furthermore, the complex interplay of determinants, both occupation-specific and generic, necessitates a comprehensive framework with an array of interventions, across sectors, settings and levels. These should act synergistically to tackle the wide and diverse range of risk factors whilst enhancing the effect of protective factors, ensuring no one is left behind.

We propose a conceptual framework to represent this complexity, including possible mental health trajectories in response to stress over time. The conceptual framework includes primary, secondary and tertiary prevention across levels: the role of health and social/community care sectors, workplace interventions (such as occupational health programmes and management policies), and economic/social policy measures. We note

that there are still many evidence gaps to inform comprehensive policies. Surveys often lack methodological robustness, i.e., inadequate sample size, limited representativeness and generalisability. Currently, most available research on mental health, both before pandemic and during the pandemic, does not adequately address functional aspects of mental health or of mental wellbeing. Post-traumatic stress disorder (PTSD), burnout and moral injury can be anticipated. Prevention must be the first priority, and appropriate treatment used should preventive measures fail.

We describe factors that increase or decrease the risk of adverse mental health outcomes in the healthcare workers at individual, organisation and societal levels. Safeguarding access to mental health services during the pandemic is an urgent need. The need for further research should also be recognised and prioritised to help understand longer-term mental health impacts. Effective interventions to protect mental health of essential workers are likely to be complex and multi-faceted, addressing modifiable risk factors to be implemented across multiple levels.

In the context of the Opinion development, evidence from multiple sources, encompassing best practices, guidelines, toolkits, among others, was reviewed. This allowed for the identification of coordinated integrated approaches to support mental health of essential workers. Despite the lack of robust evidence on the effectiveness of interventions designed to address the mental health needs of workers with or without pre-existing mental health conditions, training healthcare workers in resilience may be particularly effective for those with a history of mental ill-health. A wide range of mental health support services that can meet the diverse needs of groups with different vulnerabilities and risks should also be made available. Due to potential stigma and discrimination, efforts in the workplace to support mental health should be accompanied by due consideration of legal and ethical responsibilities. The excess burden of mental health issues in the health workforce is well-described, however assessing cost-effectiveness of interventions to address them remains complex given the challenges in quantifying the impacts to assess (economic, societal, ethical, etc.).

Organisational delivery conditions are conceptualized in this Opinion using an implementation science framework, which posits that the success of implementation depends on how its delivery is organised and is context dependent. Contextual factors such workplace culture and leadership can largely influence implementation outcomes, whereas resource constraints and barriers, as well as facilitators are also examined. Specifically, we identified several core conditions for the delivery of mental health services. With respect to the intervention, meeting and adapting to evolving user needs is important, as well as assessing the role of stigma, whilst ensuring those with a history of mental health and/or pre-disposing factors are not targeted. Many delivery conditions focused on the workplace and included ensuring safe space and processes (e.g. for help-

seeking) and fostering an environment of trust. For example, it is important to train occupational health practitioners and managers in mental health assessment and key delivery conditions while emphasising that there should be no adverse consequences for help-seeking behaviour. These and other delivery conditions set the stage to drive transformation in organisational culture towards one of acceptance of the continuum of mental health issues. To support workplace interventions, a clear and comprehensive regulatory and financial structure and mechanisms of support are required. Attention to public and private sector organisations, including multinational corporations (MCNs) and small- and medium-sized enterprises (SMEs) is needed. These enabling structures should encompass sustainable support for long-term prevention and treatment programs, and research and development of innovative approaches, such as de-stigmatization, care re-organization, regulatory frameworks, and data collection and harmonization initiatives.

The European Agency for Safety and Health at Work (EU-OSHA) stipulates that general occupational safety and health risk assessment in the workplace is a legal obligation of all employers in the EU. Through its guidelines, EU-OSHA reaffirms that these stipulations are equally applicable with regards to the mental health of workers. EU-OSHA recommends participatory psychosocial risk assessment be included as part of the occupational safety and health requirement, and used to identify risks and to inform intervention design. Further, EU-OSHA recognizes that some mental health problems may be caused or aggravated by poor psychosocial work environment, including, excessive time pressure, conflict, violence, harassment, lack of support, and/or lack of appreciation. Those factors should be identified and addressed in both preventive and remedial means, and in a complementary manner. Protection of workers' mental health is an integral part of occupational safety and health.

The Opinion concludes with eight evidence-based recommendations, complemented by action points with EU-wide and Member-State relevance. The recommendations are addressed to policy makers and managers in sectors with a high share of essential workers, as well as to mental health and occupational health practitioners. The focus of these recommendations is on fostering the mental wellbeing of the health workforce and other essential workers and the need to treat mental wellbeing as an organisational responsibility within the workplace. The recommendations address the roles of stakeholders at several levels (organisations, national authorities and EU). The action points detail the general principle described in each recommendation. Specifically, there is the need for appropriate guidance frameworks to be established, in some cases deserving legal status, to clearly establish mental wellbeing as an important workplace responsibility within organisations. This requires awareness and competencies by the leadership of organisations, which can be facilitated via education and training. To

support promotion of mental wellbeing in SMEs, the use of common digital tools (yet to be developed) can be advantageous. In addition, workplaces must develop adequate mechanisms for early identification of factors influencing mental wellbeing and for referral to professional help when preventive efforts are not effective. The organisation, as opposed to the individual worker, is to be held publically accountable for worker wellbeing. Building and sharing knowledge on interventions that work via the creation of learning communities is recommended. The identification of best practices that are cost-effective require further evidence, which should be developed by overcoming methodological challenges. Lastly, a common EU-wide view of mental health care and its re-organisation is needed with emphasis on prevention and support of mental wellbeing in not only essential workers, but the general population as a whole.

BACKGROUND

Essential workers, whether in the health or other sectors, have been hit hard by the consequences of the COVID-19 pandemic. This is not just due to the risk of infection arising from close contact with patients, the general public, and potentially infectious co-workers. Although less well recognised, they have also faced risks to their mental health.¹

The list of those at risk is long. They include healthcare personnel, long term care workers, teachers, cleaners, cooks, emergency personnel (police, fire department, civil protection), people working in transport, agriculture and food production, critical retail facilities (grocery stores, hardware stores), critical trades (construction workers, electricians, plumbers etc.), water and wastewater workers, energy and distribution, those delivering social services, and others that manage critical infrastructure and services.

When the Covid-19 pandemic hit, many essential 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. We now know that many were exposed to a high risk of COVID-19.² If infected, some were also at greater risk of becoming ill or transmitting the infection to others. They included elderly workers, people from low-income households, workers with underlying health conditions (e.g. chronic illness), those with existing mental health issues, workers in temporary or informal employment, and refugees and some migrants.

A Health at a Glance: Europe 2020 report points to several factors that adversely affected the mental health of health workers: lack of personal protective equipment, their exceptionally high workload, and the psychological pressure faced by health professionals.³ An Italian survey of health care, in March 2020, reported frequent

symptoms of stress, anxiety, depression and insomnia, especially amongst frontline workers and young women.⁴ In April 2020 a Spanish survey reported that 57% of health workers had with symptoms of post-traumatic stress disorder.⁵

In response to this evidence, support services for health workers in many countries were expanded to help them deal with the high level of stress, fatigue and psychological distress during these extremely challenging times, for example through peer support groups or dedicated phone support lines. Yet despite the growing number of studies on the mental health consequences of the pandemic on health care workers, there is much less on the situation faced by essential workers in other sectors, although the European Commission did set up a virtual network of (not-for-profit) stakeholder organizations on its Health Policy Platform to discuss and share knowledge and practices on COVID19-related mental health issues. This includes guidance to help address the mental health aspects of the COVID19-pandemic. There have also been initiatives to provide psychological support to the general population, for example through online advice or phone hotlines. However less is known about what employers have been doing to support their employees, especially those with pre-existing mental health conditions and how, if at all, these link to health services, and especially primary care.

The Expert Panel on Effective ways of Investing in Health (EXPH) highlighted in a previous opinion that measures to tackle psychological distress should be recognised as a public health priority.⁶ Comprehensive strategies, rapidly implemented, with clear lines of accountability were needed to reduce the adverse mental health consequences of the pandemic but were largely lacking. Now, as there is beginning to be some reason for optimism, it will be essential to put in place measures that can minimise the threats to the mental health of essential workers going forward and ensure that those already affected can recover without long term disability.

This means that we need innovative solutions, combining societal, organisational, team and individual responses, with engagement by all those who can provide the necessary psychosocial support.

The primary target audience of this opinion comprises those responsible for policy and health, employment, and recovery from the pandemic at national and EU level, as well as senior managers in sectors with high shares of essential workers. It should also be of interest to mental health and occupational health practitioners.

QUESTIONS FOR THE EXPERT PANEL

- 1.) What are the specific factors influencing mental health of the health workforce and essential workers?
- 2.) What interventions could be effective in addressing mental health support needs of health workers and essential workers, including those with preexisting mental health conditions? Using existing data, assess the cost of mental health problems in the health workforce and the cost-effectiveness of mental health interventions. What are the conditions for the delivery of these interventions in a cost-effective, affordable and inclusive manner?
- 3.) How can the EU address these concerns?

1. OPINION

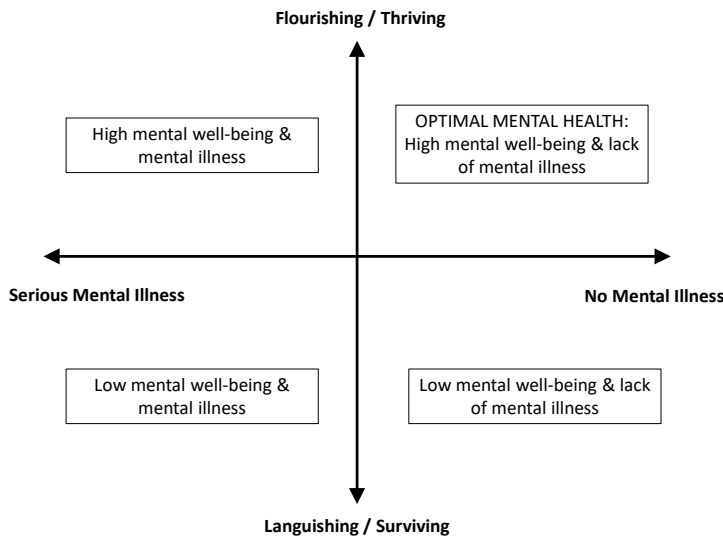
1.1. What are the specific factors influencing mental health of the health workforce and of “other essential workers”?

General overview of mental health

Mental health can be envisaged as a two-dimensional concept (Figure 1). On one dimension lies a continuum, that could be described as pathogenic or illness focused, from no mental illness to serious mental illness. On another, and arguably, a more important dimension is salutogenic,⁷ or health focused, comprising a spectrum of ability to function. This salutogenic approach is aligned with the World Health Organization’s definition of mental health as “a state of mental wellbeing in which people cope well with the many stresses of life, can realize their own potential, can function productively and fruitfully, and are able to contribute to their communities.”⁸

Some authors refer to this as the continuum between flourishing/thriving and languishing/surviving.^{9,10} In Figure 1, optimal mental health is present at the area with high mental wellbeing and lack of mental illness. The “whole health approach” to supporting the mental health of essential workers requires addressing both mental illness services and mental health promotion and protection.

Figure 1. The two dimensions of mental health



Less than optimal mental health occurs when a person shows signs or symptoms of mental illness and/or low mental wellbeing affecting their everyday function. If this is well managed, he/she may be able to restore his/her mental health to optimal levels. However, if not effectively managed, they may lead to sub-optimal mental health leaving the individual concerned unable to function day-to-day.

The signs and symptoms of mental health are many and complex. Common mental illnesses include depression (sadness and loss of interest in previously enjoyable activities, possible suicidal ideation), anxiety disorders (excessive, debilitating worrying), and post-traumatic stress disorder (long-term symptoms in response to a traumatic event, including re-experiencing the event via nightmares and/or intrusive memories). At the risk of generalisation, research tends to focus more on the mental illness dimension of mental health than the mental wellbeing dimension. Yet, mental wellbeing has received considerable attention in the media, which has been especially focussed on the psychological and emotional impacts of the COVID-19 pandemic.¹¹⁻¹³

Our understanding of mental illness and mental health often lags far behind our understanding of physical health. Identifying and treating mental health disorders is more complex than treating bodily illness or injury. Many mental illnesses lack definitive biological markers and signs/symptoms can be interpreted in different ways. Mental illness symptoms may manifest as cognitive, emotional, behavioural, and/or physical (or bodily/somatic) phenomena. This makes it challenging to rule out alternative diagnoses although there are now many assessment tools, typically based on questionnaires, designed to use with mental wellbeing and mental health/illness.

As with a physical illness, diagnosis depends on someone seeking help and overcoming the many barriers that exist in doing so. However, there are additional problems when someone has mental health problems because they may not recognise them or they may fear the stigma that is often associated with them.¹⁴

Conceptual Framework

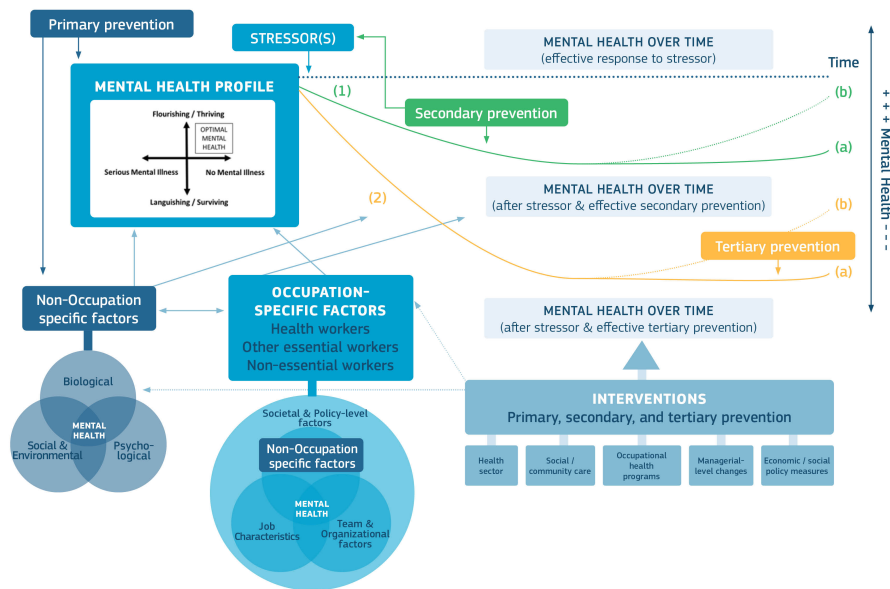
The mandate asks how the EU can support the mental health of the health workforce and other essential workers. To do so, it is first necessary to have a framework to understand mental health and its causes. These causes involve a complex interplay of biological, environmental, cultural, economic, health system, social, occupational, familial, psychological, and individual factors. Risk factors increase vulnerability to experiencing adverse mental health, whereas protective factors do the opposite. They can assist recovery after exposure to stress (harm-reduction approach), protect against adverse mental health prior to stress (protection approach), and/or promote positive aspects of mental health (promotion approach).¹⁵

A life-course approach highlights the importance of prior and current experiences.¹⁶ Thus, the mental health of a person at a given point is influenced by a combination of prior and current experiences, risk factors, and protective factors. In the present context, occupation-specific factors influencing mental health have become especially apparent during the COVID-19 pandemic and are of particular importance. This calls for an emphasis on the workplace. To help us, we have developed a conceptual framework that provides a visual representation of the factors that we must consider to effectively

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and efficiently support the mental health of essential workers. The framework includes interventions to provide primary, secondary and tertiary prevention across sectors, settings and levels. The most relevant are the health and social/community care sectors; the workplace (such as occupational health programmes and managerial-level changes), and within the wider economic and social policy arena (Figure 2).

Figure 2. Conceptual framework for supporting the mental health of the health workforce and other essential workers



Source: The authors

The focus of Figure 2 is the individual's mental health profile at a given point in time, represented by the two-dimensional grid of mental illness and mental wellbeing presented earlier. Risk and protective factors interact to influence this profile. Given the focus of this Opinion, we consider non-occupation-specific (e.g., biological, social-environmental, and psychological), which then interact with occupation-specific factors such as characteristics of jobs, teams, and organizations, all within a broader health and social care and policy context. These individually and collectively influence the mental health trajectory of the individual concerned.

We can illustrate this by looking at a hypothetical chain of events. We begin at the box labelled "Mental Health Profile". One or more stressors occurs (for instance related to the COVID-19 pandemic). Whether this leads to a deterioration in the individuals mental health depends on how the individual responds. If they effectively cope with the stressor(s), then he/she is likely to maintain his/her current level of mental health. This is the top trajectory in Figure 2.

However, the ability to cope can change over time. We can expect a worsening of mental health if (i) the stressor is very traumatic and/or prolonged over time and/or there is an accumulation of multiple stressors and (ii) the person is especially susceptible to the stressor(s) at that time due to the complex interplay of factors that determine mental health and individual thresholds. The extent of deterioration will depend on the initial mental health profile and the interaction of occupation-and non-occupation-specific risk and protective factors. This is represented by trajectories 1 and 2, with trajectory 1 involving less severe deterioration than trajectory 2. In each case, recovery may occur spontaneously, depending on the initial mental health profile and the combination of risk and protective factors.

There may be a variety of interventions that can influence modifiable risk/protective factors and/or mitigate the effects of the stressor (primary prevention), while others might mitigate the impact of the stressor on mental health and/or promote rapid recovery from the stressor (secondary prevention), and/or decrease the rate of deteriorating mental health (tertiary prevention). In each of these trajectories, there are two further pathways, a and b. In scenario 2a, the mental health of the individual continuously deteriorates over time without effective secondary prevention but remain stable at a low level with effective tertiary prevention. Scenario 1a, compared to scenario 2a, illustrates how secondary prevention reduces the extent of mental health deterioration caused by the stressor. In both b scenarios, mental health eventually recovers, returning to baseline in scenario 1b but not in scenario 2b. Thus, besides influencing the initial level of deterioration caused by the stressor, secondary prevention can prompt a faster recovery, an earlier recovery, and/or a more complete recovery and return to baseline mental health.

Figure 2 includes a simplified Venn diagram to show three non-occupation-specific factor groupings – biological factors, social and environmental factors, and psychological factors. Vulnerabilities might include genetic predisposition to mental illness, lack of social or familial support, economic difficulties, and/or psychological traits such as strategies to cope with stress or cognitive tendencies like optimism vs. pessimism.

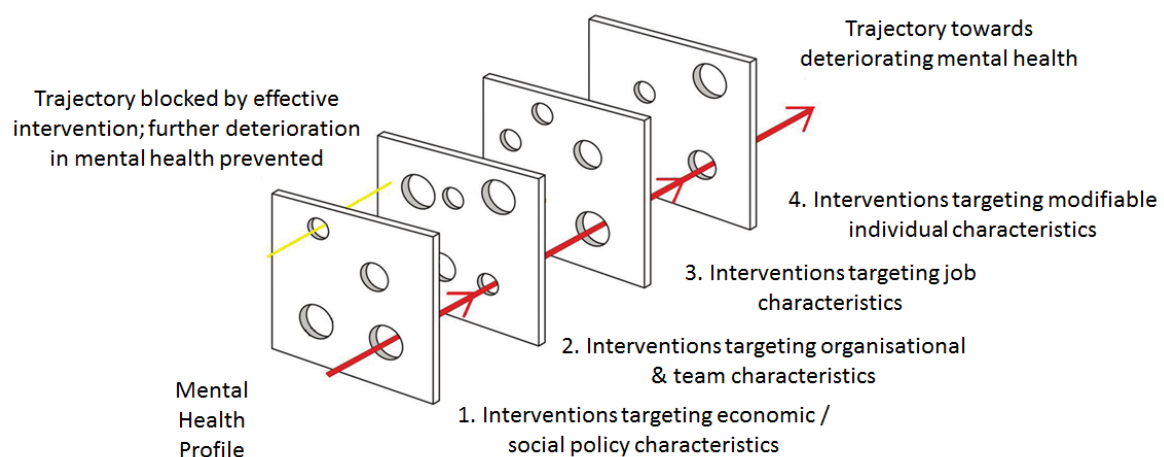
Given the mandate's focus on essential workers during the COVID-19 pandemic, occupation-specific determinants of mental health interact with these non-occupational-specific characteristics. Three different occupational groups are likely to respond differently to a stressor such as those arising in the COVID-19 pandemic. Health workers may be under severe pressure from increased workload, in addition to being concerned about contracting the virus and suffering from moral injury. Other essential workers, such as those in the food or transport industry, may also be concerned about the possibility of contracting the virus, may be less exposed, and may instead experience increased pressure from working long hours. Non-essential workers may also experience

their own pressures working from home for a prolonged time, managing simultaneous stressors such as isolation and lack of social contact, and/or financial consequences of being furloughed. Evidence on risk and protective factors for essential workers will be examined in detail in Chapter 2.

Finally, mental health can be supported by interventions enacted within and outside of the health sector at primary, secondary, and tertiary prevention levels. This is especially relevant for essential workers. For example, an employer can design and implement internal policies to increase support to employees under stress or help to organise access to care outside the organisation if needed and wanted. There is also scope for primary preventative interventions, e.g. by employers who allow employees a certain degree of control over their workload or work tasks, or government interventions to ensure a minimum income level or to develop healthy lifestyles. Available evidence regarding promising and effective interventions to support the mental health of essential workers will be explored in Chapter 3, and cost-effective interventions will be described in the Chapter 4. Delivery conditions for the implementation of interventions to support the mental health of essential workers is covered in Chapter 5.

Interventions in multiple settings at various levels can work synergistically to address a wide range of risk factors and potentiate a wide range of protective factors. Although the relationship between exposure and outcome in mental health is complex and often far from straightforward, the Swiss cheese model¹⁷ of accident causation used in risk analysis and risk management is a helpful heuristic to illustrate this synergy. See Figure 3.

Figure 3. The Swiss Cheese model for supporting mental health in essential workers



Source: Reason's Swiss cheese model combining person and systems approaches to human fallibility,¹⁸ adapted by the authors

The Swiss Cheese model assumes optimal levels of mental health at the start and provides a visual representation of how to prevent further mental health deterioration by

blocking “holes” at different stages. It does not provide a complete roadmap to achieving optimal mental health, but it is a particularly valuable heuristic for supporting the mental health of essential workers for four main reasons. First, its use in safety and occupational health means that there is already some familiarity with the model by those who need to use it. Second, it places responsibility for mental health on both the individual and the system. The person approach focuses on individual-level interventions, whereas a systems approach concentrates on the interactions among the individual, his/her employment conditions, and the regulatory/policy environment. Each slice of the cheese represents interventions at different levels that contribute to mental health of employees. For instance, it illustrates attempts by workplace leadership to build safeguards, barriers, and defences to prevent deterioration in mental health. Third, it recognizes that any safeguard or intervention will have inherent flaws or “holes”. The “holes” in this example are unaddressed risk and/or protective factors. Mental health deterioration will occur when multiple “holes” line up, leaving workers exposed. When “holes” are blocked by multiple interventions at multiple levels, the trajectory towards low mental health is deterred. This demonstrates the need for multiple interventions targeting multiple risk and protective factors occurring across levels to ensure that all individuals benefit equally from them, including the most vulnerable, and no one individual is left behind. Lastly, the Swiss Cheese model illustrates the priority given to different levels of interventions. The first slices of the cheese are large-scale, broad economic and social policy interventions designed to support the largest numbers of essential workers. For those individuals who need additional support, the next level targets the workplace organizational and team characteristics. For those who need additional support, there are interventions to address specific job characteristics. The last level introduces individual-level interventions, which can be expected to be effective as long as interventions on other levels are in place.

1.2. Specific factors influencing mental health of the health workforce and other essential workers

Exposure of essential workers to SARS-CoV-2

Supporting the mental health of the workers has been an important priority of the World Health Organization (WHO) for many years.¹⁹ This has become especially salient as a result of the COVID-19 pandemic. Particular emphasis has been placed on the “essential” worker, who was required to continue working on-site during the most severe periods, while, in order to contain the virus, millions of “non-essential” workers were confined to their homes, either unable to work or tele-working. Each Member State determined their own lists of “essential workers”, encompassing individuals who perform a range of services and operations in industries that are necessary to ensure the continuity of

critical functions of a country and maintain critical infrastructure. As defined in the mandate, essential workers include the health and care workforce, teachers, cleaners, cooks, emergency personnel (police, fire department, civil protection), people working in transport, agriculture and food production, critical retail (grocery stores, hardware stores), critical trades (construction workers, electricians, plumbers, etc.), water and wastewater management, energy production and distribution, social service organisation and other sectors that manage critical infrastructure and services. Some types of gig economy workers were also considered essential. These essential workers continued their jobs on the frontline throughout the COVID-19 pandemic, facing potential risks to their own health and the health of their loved ones as a result of higher exposure risk to SARS-CoV-2.

Compared to non-essential workers, essential workers did experience a higher risk of getting infected by SARS-CoV-2 and of experiencing severe COVID-19, with a higher risk of severe COVID-19 defined as being hospitalized or deceased, compared to non-essential workers.²⁰ In March 2020, the United States Occupational Safety and Health Administration (US-OSHA) classified essential worker types based on risk of occupational exposure to SARS-CoV-2. The level of risk depended on (i) the industry type, (ii) the need for contact within 6 feet of people known to be, or suspected of being, infected with SARS-CoV-2, and (iii) the requirement for repeated or extended contact with (a) person(s) known to be, or suspected of being, infected with SARS-CoV-2.²¹

In this Opinion, essential workers have been divided into large groups based on their involvement or lack of involvement in healthcare-related activities. Essential healthcare workers have been defined as *"all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials. This includes persons not directly involved in patient care, but potentially exposed to infectious agents while working in a healthcare setting."*²² Informal carers fall into this group. All these individuals are referred to as the health workforce and include workers of varying levels of exposure risk.

It is important to note that there are more women than men in many of the sectors defined as essential workers. In the EU, women make up 76% of healthcare workers, 76% of those working in the care sector, and 82% of supermarket cashiers.²³ The European Institute for Gender Equality advocates for gender mainstreaming in crisis situations to ensure that increased challenges to occupational health and wellbeing of women essential workers are recognised and addressed. Similarly, essential workers are disproportionately from minorities groups and also face increased challenges.²⁴

Essential workers and mental health

As described in the mandate, cross-sectional survey data collected early in the COVID-19 pandemic from healthcare workers indicates that approximately half of them reported

symptoms of PTSD⁵, 25% reported symptoms of depression, 22% reported symptoms of stress, 20% reported anxiety symptoms, and 8% reported insomnia, with women more likely than men to experience symptoms of PTS and depression.⁴ A systematic review of 6 studies (1 from India and 5 from China), published in April 2020,²⁵ support these findings. Regarding mental wellbeing in healthcare workers, 33% reported flourishing, 58% reported moderate wellbeing, and 9% reported languishing mental health.²⁶ Regarding mental health in other essential workers, an online survey of various types of essential workers conducted during the last four weeks of lockdown for COVID-19 in the Hubei Province of China indicates that 25% reported moderate-to-severe anxiety symptoms. Approximately 20% of farmers and economy staff reported moderate-to-severe depressive symptoms, while only 15% of teachers/government staff did. Approximately 12% of farmers and teachers/government staff reported moderate-to-severe stress, while 17% of economy staff did.²⁷

Before examining factors that influence the mental health of essential workers in Chapter 3 and interventions (often times addressing these factors) in Chapter 4, there are several important caveats to note regarding the mental health outcomes available. Professor Sir Simon Wessely and his colleagues note a number of areas of concern about the research on mental health during the COVID-19 pandemic.²⁸ Given data collection challenges during the pandemic, our current knowledge of mental health in essential workers is primarily limited to self-reported responses to surveys. As a result, there is a high potential for lack of representativeness, either due to low response rates, convenience sampling, and/or because of potential response bias with respect to who completes a survey (e.g., depending on the setting, it may be those most unwell, or least unwell if stigma, social desirability, and/or lack of confidentiality are potential issues). The descriptive cross-sectional nature of the surveys means that little knowledge concerning predictive factors of mental health issues is available, which implies a lack of targets for interventions. Because these surveys on mental health are not longitudinal, evidence for specific changes in mental health of essential workers compared to pre-pandemic levels is lacking. Moreover, examining groups of essential workers in isolation inhibits our understanding of whether the effect of the pandemic is different in essential workers from the general population. Increases in symptom reporting could be confounded by demographic differences such as gender and ethnicity. Although evidence from some countries suggests a decrease in mental health for the general population compared to pre-pandemic levels (e.g., in the UK²⁹), various longitudinal population cohort studies in the UK have found no increase in mental distress among healthcare workers.²⁸ According to early reports, Finnish workers' mental health has not decreased dramatically due to the COVID-19 pandemic.³⁰

A final limitation to take into account when examining research on supporting mental health in essential workers relates to the mental health outcomes available. As discussed in the previous chapter, both mental illness and mental wellbeing are independent dimensions of mental health. High levels of both symptoms of mental illness and wellbeing may co-exist, but most available research on mental health (both pre-pandemic and during the pandemic) neglects the mental wellbeing and functioning dimension. Because mental health research, in general, tends to emphasize the mental illness dimension, available survey tools do not sufficiently distinguish between mental illness symptoms and impact on function. This distinction is important because distress can be considered a normal reaction to the COVID-19 pandemic, and certain responses to stress can even be considered beneficial for effectively dealing with a threat (see Walter Cannon's description the acute stress response, or fight-or-flight response³¹). In other words, knowing the percent of individuals with anxiety or depressive symptoms or how they change as a result of an intervention may not reflect how well these individuals function. And it is the degree of functional impairment that ultimately signals a need for intervention. Little is known about the challenges that lead to functional impairment so that they can be targeted for earlier intervention (primary and secondary prevention in the framework), before care and treatment for those with ill mental health is required. In order to prepare for future crises, there is a need to develop survey tools that better distinguish mental illness from distress and measure the types of difficulties that need intervention.

SARS-CoV-2 exposure and exposure-related concerns

The association between SARS-CoV-2 and mental health problems in healthcare workers is well-established. SARS-CoV-2 exposure and exposure-related concerns also affect other essential workers, although less is known about the risk/protective factors for mental health with respect to other essential groups. Our review of the literature only identified data in this area specific to transit workers, revealing strong impacts.

Burnout and Moral Injury: Risk factors for poor mental health in the health workforce

The concept of post-traumatic stress disorder (PTSD) has been widely discussed in the literature with regard to healthcare workers and the current Covid-19 pandemic.³²⁻³⁴ There are two other distinct but related conditions that deserve attention: burnout and moral injury. All three conditions are associated with working in stressful situations and have been recognized in multiple occupations. Studies have sought to measure the frequency of these conditions, using standardized instruments, and have described varying associations.^{35-37 38}

Here we consider both burnout and moral injury, and their overlaps with PTSD in cause and presentation. Management strategies for burnout and moral injury, along with other risk and protective factors, will be addressed in Chapter 3.

Burnout

In a major health crisis, such as a pandemic, the workload of health workers inevitably increases dramatically, potentially outstripping the resources available, a problem that may be compounded by illness and, in some cases, deaths, among those involved in the response. In conditions such as these, there is an ever present risk of what is termed burnout, a condition characterised 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".³⁹ Burnout is also associated with a range of subsequent adverse mental health outcomes, including Major Depressive Disorder.⁴⁰ There are different responses to the conditions giving rise to burnout. Farber has described three.⁴¹ The first, which he termed "wear-out" or brown-out", describes the situation where someone simply gives up in the face of excessive stress with inadequate reward. The second, which he termed classic or frenetic burnout, was seen in individuals who were working ever harder to resolve their stressful situation or achieve a suitable reward. Finally, under-challenged burnout, where the stress level was low but the work was especially unrewarding.

Burnout during the COVID-19 pandemic

Even at the best of times, healthcare workers are susceptible to burnout. Their work is often intensive and emotionally challenging, dealing with patients and families facing emotional trauma, with many struggling to respond with empathy in the face of inadequate resources and other demands on their time. During the pandemic, they have faced additional stressors. The pressure of markedly increased workload has been accentuated by prolonged wearing of personal protective equipment, and with it the risks of overheating and dehydration, as well as the effects of placing a physical barrier between themselves and their patients.⁴²

There have been many studies that have measured the prevalence of burnout during the pandemic, mostly using the Maslach Burnout Inventory (MBI). While most have found elevated rates of burnout, many lack appropriate controls to assess how these figures relate to the pre-pandemic period. Furthermore, comparisons of health workers on the frontline of the COVID-19 response and others have been conflicting. The limited available evidence suggests that some individuals may be at particular risk of burnout because of their personal circumstances. Studies found that those who had children or family members over the age of 65 with a chronic illness were at increased risk,⁴³ women are especially at risk of burnout, in some cases linking this to concerns about their families,⁴⁴ perceived adequacy of PPE was associated with a lower risk of burnout,⁴⁵

and there was higher frequency of burnout among those working longer hours and who had been redeployed away from their usual work setting.⁴⁶

The implications of burnout

Research carried out prior to the pandemic emphasizes the consequences of burnout for healthcare workers. A systematic review of longitudinal studies found that burnout was a predictor of adverse outcomes in three areas:⁴⁷ (i) physical outcomes included type 2 diabetes, coronary heart disease, hospitalization due to cardiovascular disorder, musculoskeletal pain, prolonged fatigue, headaches, severe injuries and mortality at age under 45; (ii) psychological consequences include insomnia, depressive symptoms, use of psychotropic and antidepressant medications, and other mental disorders. (iii) occupational consequences include absenteeism, new disability pension, and presenteeism. It also has implications for patients. There is an extensive body of research, much based on studies on Magnet® hospitals⁴⁸, which are hospitals that are recognized for having created cultures that attract and retain nursing staff. These studies have shown that lower levels of burnout among nurses are associated with better patient outcomes, often mediated by a reduced level of what is termed “failure to rescue”, where deterioration in a patient’s condition is not detected or acted on.^{49,50} In the current pandemic, it has been shown that mortality is almost 20% higher in intensive care units operating at the highest level of intensity.⁵¹

Moral injury

Although there is no consensus definition of the term moral injury, Shay conceptualises moral injury as “*a character wound that stems from a betrayal of justice by a person of authority in a high-stakes situation*”.⁵² Litz and colleagues (2009) define a potentially morally injurious event (PMIE) as one that entails “*perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations*.”⁵³ Although much of the initial research focused upon moral injury in military personnel and veterans, a recent narrative review recognised many disciplines that have researched moral injury, including psychiatry, social work, philosophy and religious/spiritual⁵⁴, as well as health care.

Moral injury is not a mental illness in itself, but those who develop moral injuries are likely to experience negative thoughts about themselves and others.⁵⁵ A systematic review of occupational moral injury and mental health in 2018 recognised that these symptoms can contribute to developing mental health issues such as depression, PTSD, anxiety and even suicidal ideation.⁵⁶

An overlap between moral injury and PTSD has been acknowledged, for example, if the index event that the individual was exposed to is both potentially life-threatening and morally injurious.⁵⁷ Litz and colleagues⁵³ also indicate that PTSD and moral injury share similar consequences with regards to re-experiencing the traumatic event and avoidance

or numbing. The individual's role in the event can be victim or witness in both PTSD and moral injury, and the role of perpetrator is a characteristic of moral injury only. PTSD and moral injury are different with respect to the triggering event. In PTSD it is actual or threatened death or serious injury, while in moral injury it is acts that violate deeply held moral values. The necessity that is lost is different. In PTSD it is safety and in moral injury it is trust. This leads to differences in the predominant painful emotion. PTSD causes fear, horror, and/or helplessness, while moral injury causes guilt, shame, and anger. Lastly, PTSD involves psychological arousal, while as moral injury does not.

The difference between burnout and moral injury is important because using different terminology reframes the problems.⁵⁸ Burnout traditionally suggests that the problem resides within the individual, who is in some way deficient and lacks the resources or resilience to withstand the work environment.⁵⁸ This view is changing such that burnout is now often seen to be a problem with the work environment. Moral injury, from the outset, sets the problem at the organisation and with leadership.

Moral Injury during the COVID-19 pandemic

Prior to the COVID-19 pandemic, there was evidence of "an existing baseline of psychological pathology" and low morale in healthcare workers,⁵⁹ even before moral injury is considered.

Although the pandemic can be viewed as a natural disaster, the reactions of those 'in legitimate authority' will be perceived by many, including healthcare workers, as 'a betrayal of what is right'.⁵⁹ Furthermore, a lack of resources, inadequate clear guidance, or insufficient training may also mean staff perceive that their own health is not being considered by their employers.⁶⁰ "Anticipatory guilt", seeing healthcare colleagues in other countries already experiencing the adverse effects of the pandemic, has also been recognised.⁶¹ For those healthcare workers that needed to quarantine, research identified feelings of guilt, plus fear they [healthcare workers] can contaminate their own families and conflict about their roles.^{62,63} It remains unclear which staff will become very distressed during quarantine, but the conditions of quarantine can make healthcare workers anxious to return to work.⁵⁹ The challenges described here, within the context of scarce specific resources,⁶⁰ and treatment decisions that may differ from when a disease is less virulent⁵⁹ can be argued as being analogous to the PMIEs initially proposed by Litz and colleagues.⁵³

In the current Covid-19 pandemic, potential risk factors for moral injury identified include:

- If there is loss of life to a vulnerable person
- If leaders are perceived not to take responsibility for events/are unsupportive of staff
- If staff feel unaware or unprepared for the emotional/psychological consequences of decisions

- If the PMIE occurs concurrently to exposure to other traumatic events (e.g., death of loved one)
- If there is a lack of social support following the PMIE.⁶⁰

It should be noted that not all PMIEs lead onto individual healthcare staff experiencing moral injury. Four different reactions to “disaster” have been identified⁶⁴ that range from “not upset at all” to “mentally disordered”. Moreover, the concept of ‘post-traumatic growth’, with a bolstering of resilience, esteem, outlook and values, has also been recognised.⁶⁵ It is also important to note that many profound reactions of staff will be still within what is considered a ‘normal’ reaction and will not constitute mental health pathology.⁵⁹

Implications of the identification of moral injury in the health workforce

For healthcare workers in the current pandemic, which is comparable with war due to global death toll,⁵⁹ and with some now exposed to PMIEs for over a year without pause, supporting the mental health of those individuals who need it, is a critical part of the public health response.⁵⁹ Although resources have traditionally been put towards supporting staff once they have developed mental health pathology, it has been suggested that a shift in focus is required from individual to organisation,⁵⁹ and prevention and mitigation is more important than cure.⁶⁶

Other risk and protective factors for mental health during the COVID-19 pandemic

Beyond fear of becoming infected, a rapid systematic review on the psychological impact of COVID-19 and other viral epidemics on frontline healthcare workers emphasized risk factors related to fear of the unknown, threats to their own mortality, stigma by society and/or family members, and working long hours.⁶⁷ Various systematic reviews identify social support as a commonly reported protective factor for mental health in the health workforce.⁶⁸ ⁶⁷ Risk and protective factors associated with mental health in other essential worker groups during the COVID-19 pandemic has not been sufficiently studied to draw conclusions.

Risk and protective factors for mental health of essential workers in crisis situations

For non-healthcare and non-uniformed responders, parallels have been drawn between the mental health response of essential workers to 9/11 and the mental health impact of the COVID-19 pandemic.⁶⁹ In particular, an 8-year follow-up study found that non-traditional 9/11 responders (e.g., construction, clean-up, and asbestos workers; city employees; and volunteers) had consistently higher rates of PTSD than uniformed responders (e.g., police).⁷⁰ Importantly, this group mostly lacked disaster response experience and found themselves taking on tasks well outside the scope of their jobs, often not by choice but due to economic necessity.⁶⁹ It is possible to infer similar

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consequences on mental health to other groups of non-healthcare essential workers who were unprepared to cope with the consequences of the COVID-19 pandemic.

Impacts of pandemics on healthcare workers have already been discussed in literature prior to the current COVID-19 pandemic, within the context of previous infectious disease outbreaks such as SARS.^{62,71} Increased workload, fears of contagion, working with new and frequently changing protocols, barriers to usual communication and care with the use of PPE, and caring for patients who quickly deteriorate were all recognised as challenges. Furthermore, constant news coverage blurs the lines between home and work.⁷¹ Kisely and colleagues conducted a rapid review and meta-analysis of the psychological effects of emerging virus outbreaks on healthcare workers.⁷² Risk factors for psychological distress included being younger, being more junior, being the parents of dependent children, or having an infected family member. Longer quarantine, lack of practical support, and stigma also contributed to psychological distress. Protective factors for mental health included clear communication, access to adequate PPE, adequate rest, and both practical and psychological support were associated.

Table 1 provides a summary of these risk and protective factors.

Table 1. Factors that increased or decreased risk of adverse psychological outcomes in healthcare workers in emerging virus outbreaks prior to COVID-19

Factor Level	Risk Factors	Protective Factors
Individual, clinical	<ul style="list-style-type: none"> - Increased contact with infected patients - Precautionary measures creating perceived impediment to doing job - Forced re-deployment to look after affected patients - Higher risk among nurses 	<ul style="list-style-type: none"> + Frequent short breaks from clinical duties + Adequate time off work + Faith in precautionary measures + Self-perception of being adequately trained and supported + Working in an administrative or managerial role
Individual, training and experience	<ul style="list-style-type: none"> - Inadequate training - Lower levels of education - Part-time employee - Less clinical experience 	<ul style="list-style-type: none"> + Greater experience through years worked
Individual, personal	<ul style="list-style-type: none"> - Increased time in quarantine - Staff with children at home - Personal lifestyle impact by epidemic/pandemic - Infected family member - Single or social isolation - Female sex - Lower household income - Comorbid physical health conditions - Younger age 	
Individual, psychological	<ul style="list-style-type: none"> - Lower perceived personal self-efficacy - History of psychological distress, mental health disorders, or substance misuse 	<ul style="list-style-type: none"> + Supportive peers + Family support

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Service	<ul style="list-style-type: none"> - Perceived lack of organisational support - Perceived lack of adequacy of training - Lack of confidence in infection control - No compensation by staff by organisation 	<ul style="list-style-type: none"> + Positive feedback to staff + Staff faith in service's infection control procedures + Provision of protective gear + Effective staff training in preparation for outbreaks + Staff support protocols + Clear communication with staff + No infection among staff after start of strict protective measures + Infected colleagues getting better + Access to tailored psychological interventions based on needs of individual staff
Societal	<ul style="list-style-type: none"> - Social stigma against hospital workers 	<ul style="list-style-type: none"> + A general drop in disease transmission

Source: Kisley, et al. (2020)⁷²

Additional occupational health and economic risk factors influencing the mental health of essential workers in general

An umbrella review on work-related stress risk and preventive measures⁷³ identified the following groups of occupational risk factors that influence mental health and deserve attention when considering actions to support the mental health of essential workers:

- **Role:** Conflicts, violence, responsibility, role ambiguity, sense of powerlessness
- **Relationships:** Colleagues' support, senior's support, subordinates (e.g. nurses), communication, bullying
- **Control:** Limited control over the practice, dissatisfaction, lack of autonomy
- **Factors intrinsic to the job:** Workloads, shift work (night shifts in particular), work time, medical errors, medico-legal concerns
- **Organizational environment:** Participation in decision making, inadequate leisure time, excessive bureaucracy, absenteeism, reward system
- **Career:** Job security, career opportunities, promotion prospects/salary, unpaid overtime

In addition, the physical environment of the workplace and workspace has been shown to influence mental health,⁷⁴ including factors such as temperature, noise, lighting,⁷⁵ and access to private space.⁷⁶

Recessions

There is evidence suggesting that recessions are generally bad for mental health. A systematic review on the effect of economic recessions on mental health outcomes provides consistent evidence that economic recessions and mediators such as unemployment, income decline, and unmanageable debts are significantly associated with poor mental wellbeing, increased rates of common mental disorders, substance-related disorders, and suicidal behaviours.⁷⁷ The authors warn however that the research

is based on cross-sectional studies, which limits causality inferences. The Great Recession in Europe and North America was associated with at least 10,000 additional economic suicides between 2008 and 2010.⁷⁸ A literature review on the health consequences of recessions in the US provides consistent evidence that recessions, and unemployment in particular, can be significantly damaging to mental health, increasing the risk of substance abuse and suicide particularly for young men.⁷⁹ The October 2008 stock market crash in the US increased feelings of depression and use of antidepressant drugs, but did not lead to increases in clinically validated measures of depressive symptoms or indicators of depression.⁸⁰ A systematic review suggested that periods of economic crisis might be linked to an increase of general help sought for mental health problems, with conflicting results regarding the changes in the use of specialised psychiatric care. It also suggests that economic crises might be associated with a higher use of prescription drugs and an increase in hospital admissions for mental disorders.⁸¹ However, not all individuals are equally affected by economic crises or recessions, illustrating the interplay between different types of occupational and non-occupational factors. For example, the prevalence of mental health problems in England increased markedly since 2008, and such increases were greatest in people with less education and people out of work.⁸² Gender differences have also been identified; for instance, the 2008 recession in Spain was associated with an increase in prevalence of risk of poor mental health in men, but with a reduction in women.⁸³

The role of pre-existing mental health conditions

Mental health conditions are common. Prior to the pandemic, the global lifetime prevalence for common psychological disorders was estimated to be 29.2%.⁸⁴ Moreover, common mental health conditions — such as mood, anxiety and substance use disorders⁸⁵ — have been found to be common among the working population,⁸⁶ particularly amongst healthcare workers.⁸⁷

People with mental health conditions have a lower life expectancy and generally poorer health outcomes than those with no psychological conditions, due to a complex combination of socioeconomic and behavioural risk factors, often accentuated by barriers to accessing care.⁸⁸ In many countries, the COVID-19 pandemic has led to a significant disruption of mental health services,⁸⁹ while non-pharmaceutical interventions to control the pandemic, such as quarantine and physical distancing, while necessary to interrupt transmission of infection, pose risks to both physical and mental health.^{90,91} Taken together, these considerations have given rise to concerns that the current pandemic could cause relapse or exacerbation of existing psychiatric conditions.⁹² However, the full impact of the COVID-19 pandemic on the mental health of those with a history of mental ill-health is still not fully understood, including amongst essential workers.

Impact of the COVID-19 pandemic on those with pre-existing mental health disorders

People with pre-existing mental health problems were recognised early on in the pandemic as a group likely to be disproportionately affected by the pandemic and associated control measures.⁹² Therefore, they were considered to be particularly vulnerable to adverse mental health outcomes.⁹³ Evidence from previous novel viral outbreaks found that pre-existing psychological ill-health was associated with worse psychological outcomes.⁷² However, research on the impact of the current COVID-19 pandemic on this group has produced mixed results.

Certain mental health conditions — such as anxiety-related disorders — may be especially at risk of being aggravated by the pandemic.⁹⁴ A recent systematic review and meta-analysis showed that people with pre-existing mental health conditions experienced clinically and statistically significantly higher rates of psychiatric symptoms (including anxiety, depression, stress and insomnia) during pandemics compared to those in control groups.⁹⁵ However, noting inadequacies in the designs of many of the studies included in the review, the authors urge caution in attributing these outcomes to the pandemic (as opposed to selection bias due to the nature of sampling, often involving those in contact with health services). The authors recommend improved research methodologies — particularly the need for longitudinal studies where data were available on pre-pandemic psychiatric morbidity and symptom severity — in order to allow for causal associations to be made. The review findings support the urgent need for accessible mental health services to address the high levels of psychiatric symptoms experienced by people with pre-existing mental illnesses during this — and likely future — pandemics.

A recently published longitudinal study of three existing Dutch cohorts (not included in the aforementioned systematic review) confirmed that the symptom severity of people with depressive, anxiety or obsessive-compulsive disorder was systematically higher than in individuals without mental health disorders, but found that pre-existing mental ill-health did not necessarily predispose to a greater level of emotional reactivity to the pandemic.⁹⁶ The authors acknowledge, however, that data were only collected during the first month of the national lockdown in the Netherlands and, therefore, may not necessarily capture the longer-term effect of the pandemic on those with pre-existing mental health conditions. Based on these results, the authors highlight the importance of maintaining access to mental health services during the pandemic and the pressing need for further research to understand the longer-term impact of the pandemic on mental health.

1.3. What interventions could be effective in addressing mental health support needs of health workers and other essential workers, including those with pre-existing mental health conditions?

For the purposes of addressing this mandate question, we conducted a search in PUBMED and Cochrane Library for systematic reviews, reviews of reviews, meta-analysis, effectiveness, or cost-effectiveness publications considering interventions for mental health in health workforce and/or other essential workers as defined in the mandate. Specific interventions targeting burnout and moral injury were included in the search. The focus of this chapter is on interventions that have demonstrated effectiveness in the context of the COVID-19 pandemic or past outbreaks. When necessary in order to fill gaps in the available research, literature from pre-pandemic studies is described.

Limitations and challenges associated with the research concerning the effectiveness of interventions to support the mental health of essential workers include the following issues:

1. Our understanding of mental health (based on the two-dimensional model of mental illness and mental wellbeing) and its aetiology is poor. The use of a biomedical model of health can be unhelpful for mental health research.
2. Mental health is very broad in its scope. The problems studied are very different, ranging from (symptoms of) depression, anxiety or insomnia to obsessive compulsive disorder(OCD), suicide ideation, PTSD, addictions, or chronic conditions such as schizophrenia or bipolar disorder. Interventions to support the mental wellbeing dimension are understudied.
3. Measuring mental health outcomes is extremely challenging. They are often poorly defined and subjective. Mental illness often has a chronic course and individuals frequently meet the diagnostic criteria for more than one mental health problem so it is difficult to separate out one problem from another.
4. Interventions to address mental health do not always lend themselves too well to being studied using traditional randomized controlled trial designs. Talking therapies and similar interventions are complex and context dependent. They are often tailored to the individual and have components, such as the relationship with the therapist, which can be difficult to standardise.
5. Our understanding of mechanisms by which intervention work is rudimentary. Interventions to influence mental health are often complex and multi-component, which means it can be challenging to separate out effects of particular components or determine the “active ingredient” of a given intervention. Furthermore, components often interact with other factors.

6. Many interventions to support mental health show promising results in the short run, while the intervention is on-going, but impact may disappear in the long run.
7. When examining systematic reviews of interventions to support mental health, the definitions of effectiveness can be vague and vary from study to study. Moreover, similar mental health concepts can be assessed using many different scales, which can make comparison of effectiveness of interventions across studies difficult.
8. From the few economic evaluations on worksite mental health interventions, many lack methodological quality or lack evidence to support evidence-based decision making.
9. It is important to keep in mind that achieving the best outcomes depends upon providing the right type of intervention to the correct population at the right time. One size might not fit all and direct programmes to the ones most at risk might increase the cost-effectiveness of promising interventions.

Taken together, research on effectiveness of mental health interventions is generally poor. At the same time, preliminary evidence is promising.

In order to support the mental health of essential workers, the workplace itself becomes an important context for the implementation of appropriate interventions. These interventions can occur on various levels – there are policy-level (e.g., economic and social), organisational, task-job, and individual orientations. Interventions are also classified as primary, secondary, or tertiary prevention. As shown in the conceptual framework (see Figure 2), primary interventions are proactive by nature. Primary prevention prevents exposure to a known risk factor and keeps harmful effects from emerging. Primary prevention may also enhance an individual's tolerance or resilience in order to manage or cope more effectively with a stressor. Secondary prevention efforts happen before mental health causes a detrimental impact on function. Secondary interventions reverse, reduce or slow the progression of ill-health and preclinical conditions or to increase individual resources. Such secondary approaches may include both early detection and early treatment, with the aim of reducing the severity or duration of symptoms and/or to halt or slow the further development of more serious and potentially disabling conditions. Lastly, tertiary interventions are rehabilitative by nature. They reduce negative impacts and heal existing damages. Tertiary prevention efforts aim to treat and manage a diagnosed condition and minimize its impact on daily functioning. Examples of tertiary interventions include rehabilitation, relapse prevention, providing access to resources and support, and promoting reintegration in the workforce. The EU-Compass for Action on Mental Health and Wellbeing⁹⁷ has identified some additional limitations concerning interventions in the workplace to support mental health. First, intervention studies primarily address individual outcomes. Multi-modal

approaches, and especially measures implemented at organisational level, are important. These types of studies must be promoted and evaluated. Evaluation should include both process and outcome aspects, in order to capture effects that might otherwise go unnoticed. Emphasis on primary prevention is warranted that addresses risk factors in the work environment and integrates individuals affected by mental ill health in the workforce by providing appropriate support. Second, there is a lack of studies in small and medium-sized enterprises (SMEs). This is concerning because SMEs are widely acknowledged to be in need of appropriate support in terms of awareness and action implementation when it comes to mental health in the workplace. EU-level efforts should assist them in risk assessment and implementation of good practices where available. Third, much current knowledge focuses on mental ill health and negative impacts, with comparatively less evidence on the impact of positive psychological wellbeing in a healthy work environment. Further research is needed that expands the range of factors and outcomes examined to include wellbeing, flourishing, vitality and sustainability.

Potentially effective interventions to protect mental health of essential workers should therefore be complex and multi-faceted, addressing modifiable risk factors identified in the prior chapter of this Opinion, and be implemented on multiple levels.

Interventions in mental health of essential workers

Our literature search resulted in effectiveness research of interventions to support the mental health of the health workforce during the COVID-19 pandemic or in the context of previous emerging disease outbreaks (e.g., SARS, Ebola, MERS). Most of these studies are pre-dominantly concerned with hospital settings, with a lack of evidence related to social care staff or primary care staff. This is concerning because of the large proportion of deaths occurring in the community and specifically in residential care homes. Moreover, there is an important gap in research regarding interventions to support the mental health of other groups of non-healthcare essential workers during emerging disease outbreaks. These gaps must be rectified in the future as well.

Mental health interventions in essential, primary healthcare, workers

A rapid systematic review examining the mental health impact of the COVID-19 pandemic on healthcare workers and interventions to support psychological wellbeing highlights the poor study design of most studies, reflecting the urgency of the pandemic, and therefore a need to incorporate high-quality research in pandemic preparedness planning.⁸⁷ Similarly, a Cochrane mixed methods systematic review evaluating interventions to support the resilience and mental health of frontline health and social care professionals during and after a disease outbreak, epidemic or pandemics that included COVID-19 identified 16 studies. These studies mainly looked at workplace interventions that involved either psychological support or work-based interventions. No

evidence regarding how well different strategies worked to support the resilience and mental wellbeing of frontline workers was found.⁹⁸ However, other reviews do suggest that some interventions are effective in supporting the mental health of the health force and other essential workers. Furthermore, it may be possible to transfer interventions with proven effectiveness in different populations or in different contexts to essential workers in the COVID-19 pandemic.

Effectiveness of individual-level interventions

A rapid review of stress reduction techniques in health care providers dealing with severe coronavirus infections (SARS, MERS, and COVID-19)⁹⁹ provides preliminary support for the value of Cognitive-Behavioral Therapy (CBT) interventions for crisis intervention.⁷² Specifically, basic CBT skills may be effective in treating the anxiety and depression in the health workforce when paired with Psychological First Aid (PFA) principles.¹⁰⁰ ⁷² Psychological First Aid (PFA) is recommended for use in serious crisis events by the WHO¹⁰¹ and includes the management of basic safety needs (for example, food and water, information); practical care and support; empathic listening; increasing social support; providing mental health support and referrals as needed; and protection from further harm.¹⁰² Focusing on values clarification may help essential workers feel a renewed sense of purpose and meaning in their careers and with their families during a crisis like COVID-19.¹⁰⁰ Therefore, evidence suggests that workplaces should first focus on meeting the employees' basic needs, including safety, eating, and sleeping modifications where possible, while incorporating warmth, empathic listening, and validation.

Of note, systematic reviews published prior to the COVID-19 pandemic provide some additional evidence for the effectiveness of individual-level intervention to support the mental health of the health workforce. A 2015 Cochrane review¹⁰³ examining the prevention of occupational stress in healthcare workers concluded that CBT training, as well as mental and physical relaxation, all reduce stress moderately. In another systematic review of interventions to improve the psychological wellbeing of general practitioners, four studies reported statistically significant improvement in self-reported mental ill-health. Two interventions used CBT, one was mindfulness-based, and one feedback General Health Questionnaire scores and self-help information.¹⁰⁴ Lastly, arts-based intervention may be a promising individual-level intervention to support the mental health of essential workers. Arts-based intervention includes music, movement, creative arts classes, participatory arts classes, arts activities, visual arts, art appreciation classes, collages and drawing classes, poetry therapy, and stories and diary writing work. A number of individual studies demonstrate the effectiveness of arts-based interventions to support the mental health of healthcare workers and its effectiveness in health and social care settings.¹⁰⁵

Regarding the general population of workers, a systematic review on interventions for common mental disorders in the occupational health service prior to the COVID-19 pandemic suggests that only a few studies provide evidence for effective prevention among employees at risk.¹⁰⁶ Yet, a systematic review and meta-analysis of web-based psychological interventions delivered in the workplace indicates that occupational digital mental health interventions can improve workers' psychological wellbeing and increase work effectiveness.¹⁰⁷ Greater engagement and adherence was associated with interventions that are delivered over a shorter time frame (6 to 7 weeks), utilize secondary modalities for delivering the interventions and engaging users [i.e., emails and text messages (short message service, SMS), and use elements of persuasive technology (i.e., self-monitoring and tailoring)].

Effectiveness of workplace- and societal-level interventions

In broad terms, effective interventions involve increasing social and societal support and numerous workplace interventions, from communication and training to infection control, to workload management, and offering personal support.⁷² Indeed, according to the data collected by the COVID-19 Health Systems Response Monitor¹⁰⁸, during COVID-19 pandemic (even as early as April 2020 in some countries) most European countries took action to enable mental health and wellbeing of healthcare workers that included particular workplace provisions, e.g. supplying PPE, as well as assuring rest and limiting working time periods. Recent analysis by EuroHealthNet¹⁰⁹ confirms that the predominant initiatives involved direct mental health interventions and financial support, sometimes taking the form of free transportation, accommodation and/or childcare. Countries in which healthcare workers earn relatively low wages paid particular attention to financial compensation for work performed. Direct mental health interventions mostly comprised of newly established helplines and remote consultations from trained professionals. Although the effectiveness of these particular interventions to support the mental health of essential workers is unknown, the use of helplines and remote consultations is in line with an exploratory study of Chinese healthcare workers in which 30% indicated they wanted to receive one-on-one psychological counselling and 24% wanted crisis management intervention.¹¹⁰

In February 2021, the WHO and International Labour Organization issued interim guidance based on new and emerging evidence to ensure occupational health and safety for health workers in the context of the COVID-19 pandemic. In addition to hazard control to prevent occupational COVID-19 infections, the guidance recommends fatigue prevention by managing shift lengths, balancing workloads, and establishing adequate periods of rest and recuperation. A number of workplace level interventions to support health workers' mental health are highlighted, including surveillance, communication,

peer support, access to confidential support services, and addressing stigma and discrimination¹¹¹.

Based on experiences from emerging virus outbreaks prior to COVID-19, one rapid review and meta-analysis clearly indicates that most effective interventions to support the mental health of the health workforce are workplace-level interventions. Specifically, these interventions occur within the organisation by senior management and managerial staff addressing team and organisational factors such as communication and training, infection control, employee workload, psychological support for employees, and personal support for employees.⁷² A 2015 Cochrane review¹⁰³ examining the prevention of occupational stress in healthcare workers also concluded that changing work schedules was effective to reduce stress.

The UK National Institute for Health and Care Excellence (NICE) 2009 public health guideline on Mental Wellbeing at Work¹¹² (currently under revision as of 2018), recommendations focused on employers' actions upon improvement of workplace conditions.

The EU Joint Action CHRODIS (2014-2016) and CHRODIS+ (2017-2020) was funded to carry out 17 policy dialogues and implement 21 projects to improve actions for combatting chronic diseases. The outcomes of the CHRODIS+ area "Employment and Chronic Diseases" are particularly relevant to supporting the mental health of essential workers. Specifically, a Toolkit for Workplaces created as part of Work Package 8 synthesizes best practices related to Fostering Employees' Wellbeing, Health, and Work Participation.¹¹³ The Toolkit facilitates identifying workplace strengths. The Toolkit appendix contains a checklist to assess what approaches and means are currently in use in an organization and map-analyse-plan guide to tailor a program intervention. Within each domain, the toolkit describes ideas for concrete actions to (1) strengthen knowledge and skills, (2) create supporting working environment (physical, social, and digital environments are addressed), (3) adopt wellbeing-fostering policies, and (4) incentivize. Of the seven domains covered in the Toolkit, implementation of practices related to (i) Mental health and wellbeing, (ii) Recovery from work, and (iii) Community spirit and atmosphere are acknowledged as useful to help support the mental health of essential workers.

Effectiveness of coordinated and/or integrated approaches

Integrated protective approaches provided by senior management, for instance, are recommended to safeguard the mental health of healthcare workers over the use of separate mental health intervention strategies.¹¹⁴ Also, systems-level interventions should be made readily available to healthcare workers, and extended to other essential workers and non-essential workers, during and beyond the COVID-19 pandemic.¹¹⁵

Major and Hlubocky (2021)¹¹⁶ encourage integration of strategies and frameworks into larger organizational mental health frameworks. A national-level comprehensive approach to mental health of healthcare workers may offer a possible solution. The draft of Australian framework “Every Doctor, Every Setting”¹¹⁷ is an example of a national-level effort aiming to coordinate action to prevent mental ill-health and suicidal behaviour and support good mental health for all doctors and medical students through 5 action pillars: primary, secondary, and tertiary prevention, mental health promotion and leadership.

Coordinated and/or integrated approaches to manage burnout

Effectiveness of coordinated and/or integrated approaches is particularly evidenced in the management of burnout. There is widespread agreement that burnout should be viewed primarily as an organisational problem rather than an individual one. Although there is a temptation to medicalise the problems faced by affected individuals, the evidence in favour of individualised interventions is limited, even though there is some evidence of overlap between the symptoms of workers experiencing burnout and other patients with clinical depression,^{118,119} especially so for those with marked symptoms of exhaustion. However, while the manifestations may be similar, burnout has a specific aetiology arising from the work environment. In other words, an appropriate response should focus on working conditions rather than on the individual affected.

Given these considerations, there is broad consensus that the most appropriate measures to prevent burnout from arising combine organisational change with support for the individual affected. Burnout is most likely where there is a disconnection between the organisation and the individual in six areas of their working life, workload, control, reward, community, fairness, and values.¹²⁰ Consequently, an effective response will involve a comprehensive approach to all of these, involving changes in the individual and the organisation. A systematic review and meta-analysis, which examined 20 independent comparisons from 19 studies, found that while there was evidence that both organisational and individual interventions were effective, the effect size was significantly greater for the former.¹²¹

A first step is to ensure that the individual concerned has adequate resources to meet the demands placed upon them. It is also important for the individual to be able to see that the organisation has values that recognise their contribution to it, for example by emphasising the importance of supportive leadership and relationships with colleagues.¹²⁰ It is particularly important to address perceived unfairness, with one study finding decreased exhaustion, although not improvements in depersonalisation, following the implementation of weekly meetings to examine and resolve perceived inequities in the working environment.¹²²

The evidence on the effectiveness of interventions targeted at the individual are less encouraging, at least when adopted without corresponding changes in the working environment, although in part this is because the studies that have been conducted are often small or evaluate outcomes over a short time frame. For example, a trial of an intervention to teach physicians about the psychology of burnout, stress, coping with patient death, and managing distress did find a reduction in symptoms of burnout but this was only measured at seven days post-intervention.¹²³ Other studies have focused on general stress relieving measures, such as yoga,¹²⁴ exercise, and training in stress management. Others have involved cognitive behavioural therapy and relaxation techniques, although a Cochrane review found only low-quality evidence supporting the use of cognitive behavioural therapy, mental or physical relaxation, or changing work schedules.¹²⁵

In reality, changes to the organisation of the workplace that would be desirable in normal circumstances will be extremely difficult during a pandemic. Consequently, it is necessary to look for other measures that might be able to mitigate the consequences of the conditions that give rise to burnout. Although evidence of effectiveness is limited, one group of authors has advocated what they term “micro-practices”, activities that require minimal time to learn and implement. Examples include taking a minute to reflect on one’s wellbeing, including hunger and hydration, while using hand sanitiser.¹²⁶ Another has suggested a series of practical measures that encapsulate established best practice in creating a work environment conducive to supporting the mental health of the health workforce,¹²⁷ and can be extended to other essential and non-essential workers.

Box 1. Best practice in creating a work environment conducive to supporting the mental health of the health workforce

- Provide clear messages that clinicians are valued and that managing the pandemic together is the goal.
- Provide work schedules that promote physical resilience, enabling adequate sleep with access to rooms for those working long or multiple shifts, easy access to water, healthy snacks, chargers for phones and other devices, and toiletries, and designated times for clinicians to take breaks, eat, and take medications.
- Reduce noncritical work activities, such as eliminating non-essential administrative tasks.
- Provide a central source for updated information and clear communication of well-defined protocols, expectations, and such resources as childcare via e-mails, tweets, and automated calls.
- Encourage clinicians to openly discuss vulnerability and the importance of protecting one's emotional strength.
- Foster spiritual resilience through distribution of positive messaging that emphasizes appreciation for clinicians' dedication and altruism, including sharing stories of success, rather than focusing on failures and stresses.

- Develop an evidence-based menu of interventions tailored to diverse workplace settings, including wellness committees and employee assistance programs, informed by surveys to assess stress points, fears, and concerns.

Source: Dewey et al, 2020¹²⁷

Coordinated and/or integrated approaches to support mental health

Numerous coordinated and/or integrated strategies were initially developed to address moral injury and derived from research within the military and with veterans. The findings can potentially be applied to both healthcare and allied settings, and extended to other essential workers and non-essential workers as well. It has been proposed that strategies to address moral injury can be divided into before, during, and after the crisis.⁵⁵

Before

Military research has recognised that preparing staff for the job and associated challenges reduces the risk of mental health problems.¹²⁸ In the healthcare setting, workers *"should not be given false reassurances, but a full and frank assessment of what they will face."*⁵⁵ It has also been suggested that organisations should *"immediately reflect on the challenges the staff faced at baseline"*, such as shift-working and workload, that can all impact on wellbeing.⁵⁹

During

Individuals benefit from tangible and practical support.⁷¹ During a crisis, organisations can support staff in a range of practical ways, as summarised in Box 2. Psychological support should be offered to all staff in quarantine,⁵⁹ and drop-in psychological support, an effective intervention recognised in previous outbreaks,¹²⁹ provided for those working. However, the availability of support will vary and is likely to be scarce.⁵⁹ Remote psychological support mechanisms need to be considered in the context of pandemics, via digital platforms available.⁵⁹ While peer support has its place, off-loading to a relative stranger can also be useful to staff.⁵⁹ Routine support available to staff should include a briefing on moral injuries, as well as an awareness of other causes of mental ill health and what to look out for.⁵⁵

Box 2. Proposed ways that organisations can support the mental health of workers during a pandemic

- Providing food, drink and rest facilities
- Ensuring staff do not exceed safe hours by encouraging reporting and monitoring of hours, and preparing reinforcements so staff can take annual leave and breaks
- Focusing on dynamic workload management and clear role expectations
- Proactively addressing resource inequities across the organisation

- Proactively resolving housing or transport issues for staff to reduce anxiety of infecting family members and safely travelling to and from work
- Regular situational updates for all staff, including realistic and frank information about risk and adverse events, e.g. report of death among colleagues or advising staff to write a will
- Regular praise for staff and acknowledgement of the unprecedented and exceptional circumstances
- Being visible on the ground throughout the pandemic (managers, senior staff)
- Clear messaging, rationale and guidance for changing standards of practice
- Encouraging a two-way dialogue and being open to suggestions and ideas from staff
- Facilitating debriefs and morale building communal time
- Designing rotas so that teams can stay together (despite migrating through changing shift times) throughout the pandemic
- Being clear that staff safety is the number one priority
- Providing adequate PPE and identifying/removing high-risk staff from frontline work to reduce anxiety for becoming infected Providing education on the normal responses to extreme stress to reassure staff
- Educating team leaders on debriefing practices and the needs of individuals
- Providing formal and informal psychological support
- Ensuring staff in quarantine are regularly supported and communicated with during and after their isolation
- Planning specifically for supporting teams if colleagues are critically ill or deceased
- Ensuring there is appropriate support for different staff grades and disciplines, e.g. doctors and nurses, as well as porters and cleaning staff
- Keeping up to date with evolving guidance on supporting staff and recommendations

Source:Walton etal., 2020⁵⁹

The role of leadership, in its visibility, humanity and flexibility during a crisis, is crucial - maintaining honesty in communication whilst remaining calm, and empowering individuals within teams to become their own leaders.⁵⁹ It is also important to recognise that the prolonged nature of the pandemic, and the likelihood of ongoing high levels of absenteeism for both physical and psychological reasons, means the "baton of leadership will need to be passed between people during the marathon."⁵⁹ More senior managers should keep an active eye on more junior ones and check how they are doing.⁵⁵

Colleagues can support each other spotting early signs of concerns in themselves and others, offering colleagues the opportunity to talk, signposting to psychological services, being kind to each other and encouraging self-care; those co-ordinating psychological support in departments should offer debrief/supervision sessions for peer supporters.⁵⁹

After

Formal psychological support for those in front-line roles affected by Covid-19 should be prioritised and readily accessible, as lengthy waits for treatment are recognised as a reason why people do seek it.⁶⁰ Of note, individuals with moral injury related mental health disorders are often reticent to speak about guilt or shame, and may focus on classically traumatic elements;⁶⁰ any psychological screening needs to be mindful of this presentation. 'Active monitoring', as defined in guidance for PTSD, is also advised¹³⁰.

Specific ongoing psychological interventions proposed in the context of moral injury include Cognitive Processing Therapy (CPT) to reduce trauma related guilt, Acceptance and Commitment Therapy (ACT), aimed to promote non-judgemental acceptance of internal experiences, and Adaptive Disclosure (AD), targeting recognised mechanisms of moral repair.⁵⁴ One-off psychological debriefs are felt to be unhelpful in moral injury, as are some standardised treatment for PTSD such as Prolonged Exposure.^{60,131}

Safe multidisciplinary spaces to discuss clinical cases and reflect upon their impact, such as Schwarz rounds, are also cited as another mechanism to for healthcare workers to discuss difficult emotional and social issues arising from patient care.^{132,133}

Interventions to address the mental health needs of essential workers with pre-existing mental health conditions

Consistent with the gaps in knowledge of the impact of the pandemic on those with pre-existing mental health conditions in the essential worker population, there is a lack of robust evidence for the effectiveness of interventions designed to address the mental health needs of this group who may be at particular risk.

A rapid review of the evidence for mental health interventions during COVID-19 and other pandemics found that whilst research on effectiveness of interventions was growing, few studies distinguished between *new* mental health problems triggered by medical pandemics and those that were *pre-existing*, with the suggested finding that training healthcare workers in resilience may be particularly effective for those with a history of mental ill-health.¹³⁴ Moreover, the authors advocate for the provision of a wide range of mental health support services that can meet the diverse needs of groups with different vulnerabilities and risks (a recommendation common to other papers on this subject^{92,94}).

An article on early interventions to support hospital staff during COVID-19 raises a particularly important issue, pertinent to those with pre-existing mental health conditions, which requires attention.¹³⁵ The authors suggest that employers should

consider how best to monitor staff with pre-existing mental ill-health and ensure the adequate provision of additional support for this vulnerable group. Whilst an important recommendation, employers should be conscious that those experiencing psychological ill-health may be subject to stigma and discrimination, particularly in the workplace.¹³⁶ As a result, efforts in the workplace to support those with pre-existing mental health conditions should be accompanied by due consideration of legal and ethical responsibilities — such as protecting employee confidentiality and preventing workplace discrimination¹³⁷ — so as to avoid the potentially adverse consequences of singling out a particular group. In healthcare settings, peer support programmes — which enable healthcare teams to support and monitor each other — have been proposed, as has training of team leaders to identify more serious mental health issues.¹³⁸

A number of other relevant recommendations — particularly with regards to future research priorities and design of interventions — to support the mental health needs of those with pre-existing mental health conditions can be found within the academic literature.

Even at the start of the pandemic, the requirement for coordinated, multi-disciplinary research to understand and reduce mental health issues in vulnerable groups — such as healthcare workers and those with pre-existing mental health conditions — was recognised as a priority for further study.¹³⁹ In particular, experts have called for high-quality data to understand the causal mechanisms associated with poor mental health in order to optimise the effectiveness of psychological interventions for different groups, thereby enabling the development of evidence-informed interventions which can address causes that are thought to be modifiable. Moreover, exploring the coping strategies that have been successfully employed by those with pre-existing mental health conditions during the pandemic has been recommended, in the hope that these can be reinforced and expanded to improve future resilience.^{139,140}

Within the literature, there is a consensus that service users and people with lived experience of mental ill-health should be involved centrally in co-developing ethical research and designing inclusive mental health services, as well as in monitoring the quality of these services.^{92,139} Moreover, building in user-centred monitoring and evaluation techniques for mental health services should enable interventions to be amended or terminated if they prove to be ineffective. Regarding service provision, there is a need to facilitate diverse and flexible access to mental health care, with a recognition that community support services or remote therapies may not be appropriate for everyone and, therefore, should be considered as an adjunct to mainstream mental health services, but not a replacement. The authors of a position paper on how mental health care should change as a consequence of the COVID-19 pandemic, also stress the risks associated with promoting cheap — but ultimately ineffective — interventions, as

this is likely to exacerbate existing inequalities and worsen mental health outcomes globally.⁹²

European Commission Initiatives related to supporting the mental health of essential workers

The results of currently funded projects by the European Commission may help to support the mental health of the health workforce and other essential workers. Such projects, and others, may result in good or best practices that could be transferred to different settings or countries. The EC mechanisms for identifying, sharing and scaling up the results and implications are also in place, primarily via the [Steering Group on Health Promotion, Disease Prevention and Management of Non-Communicable Diseases | Public Health \(europa.eu\)](#). The European Commission Directorate-General for Health and Food Safety (DG SANTE) supports a number of initiatives related to sharing good practices in workplace mental health, including the Public Health Best Practice Portal (<https://webgate.ec.europa.eu/dyna/bp-portal/>) and stakeholder groups facilitated by the EU Health Policy Platform (<https://webgate.ec.europa.eu/hpf/>). Various Joint Actions and Research and Innovation Actions to improve mental health have been funded and future calls are planned in the Horizon Europe Work Programmes and the new EU4Health Programme. Evidence resulting from these projects is most welcome, and shortcomings in previous literature in evidence-production processes are to be mitigated.

1.4. Cost of mental health problems in the health workforce and the cost-effectiveness of mental health interventions

The body of evidence available on the cost-effectiveness of mental health interventions in the workforce has several important limitations. First, compared to other areas of research, there is a considerable scarcity of research regarding economic evaluation of mental health interventions. Second, indirect (or societal) costs play an important role, as much of the cost burden is attributable to inability to work rather than costs associated with treatment.¹⁴¹ Furthermore, promoting and protecting mental health is typically intersectoral (involving actions undertaken by sectors outside the health sector), and this direct non-medical costs play an important role.¹⁴² Third, there are challenges with respect to defining and measuring outcome measures. Often times only intermediate endpoints can be assessed and may not express the final outcome of symptom/disorder exacerbations, relapses, and recurrences. Because mental health affects many functions and produces many symptoms, it is difficult for the outcome to encompass all of these impacts. Patient-reported outcome measures (PROMs) are especially relevant, as the objective of interventions to support mental health is primarily to improve individual's physical, mental, and social functioning. Lastly, it is difficult to

define a mental health “intervention” because a single intervention tends to have multiple elements that contribute to its effectiveness. This is even more challenging for complex interventions developed at individual, family, group, organisational, community, and societal levels. In conclusion, determining cost-effectiveness of interventions or programmes to support mental health is challenging because the evaluation must go beyond the economic costs and benefits to include social, organisational, and ethical impacts.¹⁴³

Costs of mental health problems in the workforce

Even prior to the COVID-19 pandemic, mental health problems caused significant financial impact. In 2013, the total cost of work-related depression alone in the EU-27 was estimated to be €620 billion per year. The major impact is suffered by employers due to absenteeism and presenteeism (€270 billion), followed by the economy in terms of lost output (€240 billion), the health care systems due to treatment costs (€60 billion), and the social welfare systems due to disability benefit payments (€40 billion).¹⁴⁴

Publicly available assessments of monetary costs of mental illness typically report large numbers associated with lost production, reduced performance due to psychosocial problems, future use health and social care services, etc.

Cost-effectiveness of workplace mental health programmes in general

The evidence on cost-effectiveness is even more scarce than the evidence concerning effectiveness, and for some programmes, the costs of the programme exceeded their benefits. Thus, a careful analysis is required before starting workplace mental health interventions. These findings highlight the importance of ensuring that the implementation of workplace mental health programmes represents a good use of resources. Some evidence points that workplace mental health programmes are more likely to deliver greater returns as they mature, rather than yielding immediate financial benefits.

Cost-effectiveness of programmes to support the health workforce and other essential workers

No specific cost-effectiveness data for interventions or programmes to support the mental health of the health workforce and other essential workers during the COVID-19 pandemic was identified in the evidence review for this Opinion.

Regarding the cost-effectiveness of interventions following crisis situations, such as major incidents of terrorism, a “screen-and-treat” approach for Post-Traumatic Stress Disorder in the general population has been examined in England. The approach involves a combination of proactive outreach, screening using validated brief questionnaires, and evidence-based interventions. According 2020 pre-print results, the incremental cost per Quality-Adjusted Life Year (QALY) gained was £8,297, showing it to be cost-effective.

Although this finding was in the general population in the context of terrorism, it offers some indication of the expected benefits today of such a programme implemented in organizations employing essential workers suffering the mental health consequences of the on-going COVID-19 pandemic.¹⁴⁵

1.5. What are the conditions for the delivery of these interventions in a cost-effective, affordable and inclusive manner?

Delivery conditions are conceptualized in this opinion using an implementation science framework.¹⁴⁶ Implementation science is a field of study that examines the “research-to-practice gap” regarding the sustainable uptake of evidence-based practices or innovations. In implementation science research, the study of intervention effectiveness is separated from implementation effectiveness, which typically refers to the strategies developed to disseminate the intervention and address contextual barriers to intervention uptake. Implementation science is a growing field and, in the field of mental health specifically, research on these delivery conditions is lacking.¹⁴⁷ Implementation science frameworks are available to help to structure the systematic capture of information regarding appropriate delivery conditions.¹⁴⁸

What is known in the implementation science literature is that the success of implementation is context dependent. Specifically, a review of contextual factors reported to be associated with implementation of healthcare initiatives found that culture and leadership were identified as strong influencing factors for successful implementation.¹⁴⁹ Key components were varied and described at individual-, team- or organisational-based contextual factors, external environment and multilevel contextual factors (resources, leadership, management support, culture, evaluation, social capital, learning climate, compatibility, implementation setting), with team characteristics being the least reported, although teams were deemed central to effective care organisation. Leadership was emphasized as quite important, yet examined at the organisational level in only a few studies reviewed.¹⁵⁰ The quality, cost, and equity outcomes of delivery of health-related interventions may be influenced by the organization’s capacity (e.g., size and capital assets), formal and informal organisational structure (e.g., leadership, hierarchical structure, governance), finances to pay for the intervention, characteristics of the users (wants, needs, preferences), and culture (shared values, beliefs, assumptions).¹⁵¹

Delivery conditions for the successful implementation of workplace mental health programmes in general

Guidance for promoting mental health in the workplace¹⁵² offers a number of recommendations in this regard. Employee participation in the design, implementation and evaluation of programmes will improve their effectiveness and efficiency. Tailoring

the programmes to the circumstances of a particular workplace context directly influences the likelihood of effectiveness. Programmes must be evaluated in real-time, as they happen, and re-assessed and re-oriented as required. Ethics require special attention in mental health programmes. Confidentiality of information will need to be ensured. Programmes need to be targeted to benefit both employees and employers, and it should be made clear to employees that no harm can come from participation.

The UK Standard on risk management¹⁵³ describes additional principles to be applied when managing psychosocial risks, which are aligned with previous discussion on risk and protective factors and characteristics of interventions, including the role of communication.

Specifically with respect to inclusivity, CHRODIS+ Work Package 8 created A Training Tool for Managers to promote inclusiveness and work ability for people with chronic health conditions.¹⁵⁴ The CHRODIS+ Toolkit¹¹³ provides an illustration of the delivery conditions at multiple levels within an organization to facilitate successful implementation of workplace programmes to support the mental health of essential workers.

Conditions for delivery of programmes to support the health workforce and other essential workers

Regarding essential workers, and frontline health and social care professionals specifically, one review identified some barriers and facilitators to effective delivery of workplace interventions to support mental health during and after a disease outbreak, epidemic or pandemics (SARS, Ebola, MERS and COVID-19).⁹⁸ Two important barriers to effective implementation were: (1) lack of awareness about the needs and resources of frontline workers, either because they were not aware of their own needs, or because the organizations were not aware of them; and (2) resource constraints, including lack of equipment, staff time and skills. Three important facilitators of effective implementation were: (1) flexible interventions that were culturally appropriate, adaptable and/or able to be tailored to meet local needs; (2) effective communication and cohesion through horizontal and vertical networks that strengthen social capital and improved team resilience; and (3) a positive learning climate for everyone involved in implementation of an intervention. Frontline workers' knowledge and beliefs about the intervention acted as either a barrier or facilitator to implementation, depending on the study.

Delivery conditions associated with mental health interventions to support the mental health of the health workforce and other essential workers

The use of the five high-level domains from the Consolidated Framework for Implementation Research (CFIR) is particularly useful here.¹⁵⁵ These domains are: (1) Intervention characteristics, (2) Implementation Process (such as intervention champions), (3) Characteristics of the individuals involved (such as knowledge and

beliefs about the intervention), (4) Inner setting (such as the organizational level characteristics, work culture), and (5) Outer setting (such as external policies and incentives).¹⁵⁶

1. Intervention Characteristics

The list of categories under this domain include the source of the intervention (internal vs. external), the strength and quality of the evidence supporting it, the relative advantage of using it, its adaptability, its trialability, its design and packaging, and its cost.

The EXPH drafting group members placed particular emphasis on adaptability. The intervention must meet user needs and adapt to their evolving needs over time. The intervention must be adaptable to personal factors (e.g., age, family, and socio-economic status), and occupational factors (e.g., whether the individual is a healthcare worker or other essential worker, nurse vs. doctor, stress level, workload, control/demand job characteristics, and the potential for role switching) with due consideration for the setting and mode of delivery. The interaction between personal and occupational risk factors requires consideration. To ensure adaptability and related to the internal source of the intervention, co-design and co-production of intervention was proposed. This would necessitate sound understanding of the needs of targeted, representative, and inclusive groups of potential intervention users.

Furthermore, the drafting group members endorsed statements corresponding to intervention evidence strength and quality and cost, citing the need for more high-quality longitudinal research on the cost-effectiveness of mental health interventions. This requires good monitoring and management systems, constant evaluation of interventions, and a focus on examination of mechanisms as to why an intervention is working.

Finally, design and packaging is important. Specifically, emphasis on prevention was preferred over treatment because primary prevention was viewed as more cost-effective in the long-term. The preference for continuous care and intervention was endorsed such that it occurs prior to, during, and after a crisis. Appropriate referral systems must be in place, but peer support groups were highly supported by the EXPH drafting group members (over programmes led by a mental health professional). Building and developing trust among co-workers was viewed as essential. These programmes could be packaged as “mandatory de-briefs” or “preparedness sessions” to help deal with change. Training should include identification of early working signals of potential mental health deterioration or burnout. Widespread screening systems for mental health issues ought to be instituted and vouchers for follow-on care could be offered. Interventions should be integrated and multi-disciplinary and may include community-based

intervention (e.g., exercise, meditation, and arts-based activities). Practicing self-compassion was considered an important intervention component.

General occupational safety and health risk assessment in the workplace is a legal obligation of all employers in the EU. The participatory psychosocial risk assessment should be part of this requirement and used to identify risks to mental health and inform design of an intervention.

2. Implementation Process

In the CFIR, categories related to the implementation process of the intervention are separated from the intervention itself. These Process categories include planning, executing, reflecting and evaluating, and engaging different stakeholders. The stakeholders range from opinion leaders to formally appointed implementation leaders, to “champions” of the intervention on-site, to external change agents, to the innovation participants themselves.

The EXPH drafting group members addressed the categories of planning and executing the intervention by describing the importance of building competencies in mental health assessment for occupational health practitioners and managers. They also valued train-the-trainer programmes to ensure sustainability of the intervention. Reflecting on and evaluating the intervention and implementation process was seen as an ongoing need, with constant evaluation and collection of feedback from intervention users. This quality assurance / quality control information should then be used to evolve the intervention and its implementation accordingly. A wide range of interventions should be offered to meet the needs of all potential users, which supports the Swiss Cheese Model of Intervention. The value of “champions” of the intervention was raised. This refers to peers, who had participated in the programme and found it beneficial, could help promote it among their colleagues.

3. Characteristics of the Individuals Involved

The list of categories under this domain include the knowledge and beliefs about the intervention, self-efficacy, individual stages of change, individual identification with their organization/workplace, and other personal attributes.

The EXPH drafting members emphasized the importance of understanding the intervention users potential lack of interest in the intervention (related to stage of change) because of the stigma related to having or admitting mental health issues, especially for the health workforce. Furthermore, their knowledge and beliefs about the intervention regarding mental health as the target and the confidentiality of the data collected during the sessions was also viewed to influence use. The suggestion was made to NOT target those with a history of mental health and/or pre-disposing factors, as this could further alienate the individual from seeking help.

Other personal attributes that were identified to influence intervention uptake and/or effectiveness were related to the diversity and heterogeneity of the workforce in terms of profession, culture, language, and ethnicity. Understanding the characteristics of early adopters of an intervention could be leveraged to expand reach, while, at the same time, seeking to understand those who do not want to use existing interventions or resources and why is also important. Cost was considered to be a possible barrier to be considered when planning format, content, and channel of implementation. In addition, to facilitate access to all interested individuals, the timing of the sessions (e.g., time of day, weekday vs. weekend) should be appropriate to the individuals given their commitments outside of work and availability.

Lastly, given the importance of the inner setting of the workplace that will be detailed in the next section, the individual's identification with their organization/workplace was viewed as a critical condition for success delivery of the intervention. Specifically, the individual must feel psychologically safe, trust his/her co-workers, and feel that the organization they work for and its members care about them and value they work they do.

Some mental health problems may be caused or aggravated by poor psychosocial work environment that includes excessive time pressure, conflicts, violence, harassment, lack of support, and/or lack of appreciation. Those factors should be identified and addressed, either to prevent their occurrence or to remedy them once present, or both strategies can be worked in parallel. Insufficient intervention in this area may cause workers to be or become resistant and/or have feelings of resentment because they believe they need to 'change', while the problems in the work environment remain unchanged.

4. Inner Setting

This domain refers to the workplace and its organizational culture. It contains categories such as structural characteristics, networks and communications, culture, implementation climate (including tension for change, compatibility, relative priority, organizational incentives and rewards, goals and feedback, and learning climate) and readiness for implementation (including leadership engagement, available resources, and access to knowledge and information).

The EXPH drafting group members felt that, in order to support the mental health of the health workforce and other essential workers, the most important delivery conditions occurred at this level of management or senior management. Some of the ideas presented previously relate to categories in this domain. For instance, the support shown for peer group support interventions for the health workforce is related closely to networks and communication and issues surrounding stigma about admitting a mental health issue associated with organizational (dis)incentives and rewards. In particular, EXPH drafting group members advocated that there should be no adverse consequences

for help-seeking behaviour. Incentives could be offered for assuming extra work during the pandemic, and might include extra pay, fewer night shifts, shorter shift hours, and/or less administrative burden. In addition, performance assessment for managers should include indicators on the wellbeing of their employees. In this way, mental health would be placed on equal footing with other indicators, emphasizing the moral and ethical responsibility they hold with respect to their employees' wellbeing.

Most of the interventions proposed by the EXPH drafting group in this domain related to effecting changes in organizational culture. For instance, there is a need to shift the mentality from blame on the individual for mental health issues to viewing them as the result of contextual or environmental challenges. The workplace culture must be one of acceptance of the continuum of mental health issues. They suggested that mental health professionals be involved in occupational health activities in the workplace. Drafting group members advocated for the creation of "flat hierarchies", such as those in UK magnet hospitals designed to attract and maintain staff. Furthermore, they emphasized the need for fostering a psychologically safe workplace, where staff are comfortable expressing their thoughts and feelings. They extended this concept to the creation of a learning climate, where successes and failures can be openly shared and accepted.

Factors related to readiness for implementation were widely discussed. Leadership engagement, in the form of top-down intervention from the "big boss" was seen to be one way for the organization to show they care. Leadership engagement in participatory processes with staff and involvement in team cohesion exercises was also valued. Training for managers was one form of access to knowledge and information and considered to be an important available resource. Specific training topics included general leadership, how to conduct risk/needs assessments related to mental health, how to select appropriate interventions to meet those needs, how to value employees, and how to empower employees to create meaning in their work.

5. Outer setting

The domain refers to the context in which the inner setting operates. It includes categories such as user needs and resources, cosmopolitanism, peer pressure, and external policy and incentives. The majority of the focus group discussion was focused on recommendations for national and EU-level policy to support the mental health and of the health workforce and other essential workers and to support the workplaces and organizations to intervene within their inner settings to foster cultural changes in line with this goal. This discourse aligns well with the external policy and incentives category. Many themes were well-supported among members of the EXPH drafting group. They advocated for policies that prioritize mental health and wellbeing, to the same extent as cancer, for instance. Guidance for national level mental health plans that focus on the mental health continuum and address diversity and inclusiveness are needed. At the

same time, acknowledgement that implementation of plans occurs on local and regional levels means that support to lower level implementation groups is critical. They wanted to see an increase in mental health care and support in the community and an improved integration of mental health and mental health professionals in to primary care settings. The number of mental health professionals in the public sector should be increased, and professionals in the private sectors utilized in times of crisis. Mental health should also be integrated into occupational health and even safety to ensure adequate support for the health workforce and other essential workers. This action was believed to enhance compliance to standards. At the same time, the differences in the role of occupational health and the extent of mental health capacity across Member States must be acknowledged and addressed so that no one state is left behind. Regulatory frameworks are needed to ensure clear accountability for staff mental health and wellbeing. Minimum standards entitling each citizen to some basic level of mental health support could be developed. Competencies for mental health practitioners should be developed and then regularly assessed and certified. Mental health trainings for senior management should be mandatory, and training in mental health should be part of health professional curriculums and continuing education programmes.

Inter-sectoral collaboration for mental health at the EU-level is warranted. Various Directorate Generals can extend EU influence over health. Health can be incorporated into EU economic policies that are part of joint recovery from the pandemic. Sharing of cross-border and inter-regional resources to address surge capacity is also important. Furthermore, mental health data collection should be standardized across Member States. Regulation is needed to ensure data collection on diversity-related characteristics such as ethnicity and sexual orientation. Mental health data trends of citizens should be tracked and aggregated at EU-level. Enhanced protections, beyond the GDPR, may be required to address issues of confidentiality and privacy in data collection, transfer and storage, especially for digital mental health interventions.

In summary, the outer setting must provide the regulatory and financial structure to support inner setting interventions in the public sectors, companies, SMEs, and workplaces. Financing mechanisms are required, including sustainable support for long-term mental health promotion, prevention of mental ill-health, and treatment programmes, research and development of innovative new programmes, de-stigmatization interventions, care re-organization, regulatory frameworks, and data collection and harmonization initiatives.

Finally, EU legislation on occupational safety and health (OSH) and the European Agency for Safety and Health at Work (EU-OSHA) implies that protection of workers mental health is an integral part of OSH.^{157,158} The Occupational Health and Safety (OH&S) management system, ISO 45001, is an international standard for health and

safety at work. Introduced in March 2018, it provides a Plan-Do-Check-Act (PDCA) model as a framework to identify OH&S hazards, risks, and opportunities to proactively manage safety, health, and support worker wellness and wellbeing.¹⁵⁹ ISO 45003 is a standard due to be released in summer 2021 that will offer organisations practical guidance on how to organise work in such a way that manages psychosocial risks to staff in the workplace.¹⁶⁰

Occupational risk management is covered under the Framework Directive on Safety and Health at Work (89/391/EEC) adopted in 1989.¹⁶¹ As additional guidance from the EC regarding this directive suggests,¹⁶² concerns and needs regarding psychosocial risk management have evolved and require further legislation. The EU Strategic Framework on Health and Safety at Work (2021-2027) was adopted in June, 2021.¹⁶³ The prior EU OSH Strategic Framework 2014-2020 had helped to develop support actions and mobilise actors around the key strategic priorities. It is important that implementation reflects the European policymaking priority on workplace wellbeing and the changing world of work. Specifically, as supported by the European Council, implementation should consider a proposed EU mental health strategy¹⁶⁴ and incorporate the Work-life Balance Directive.¹⁶⁵ A number of initiatives highlight the need to step up actions to secure an EU Health and Safety Directive on Psychosocial Risks^{166,167} in the workplace as a means to covering and protecting from the way work is organised (e.g., work pressure, the time pressure, control/influence, monitoring and surveillance, performance management and change, etc.) as well as the social aspects (management quality, support from management and peers, harassment and violence, bullying). The legal instrument to accomplish these aims should be discussed among EU-level decision-making bodies. Furthermore, the Coalition for Mental Health and Wellbeing in the European Parliament (<https://mental-health-coalition.com/>), established in 2012 by Mental Health Europe, champions for a coordinated response to address workplace mental health and wellbeing through the pillars of both a comprehensive European Mental Health Strategy and by working with member states so that workplace mental health and wellbeing aspects are incorporated into key labour and occupational safety and health policies.

1.6. Recommendations

Supporting the mental health of the health workforce and other essential workers should be guided by the principles established in the Recommendations below. Each recommendation is further elaborated by Action points that clarify recommended instruments to be used by specific actors to carry out these principles. The level at which

those instruments are defined can be left open in most cases, as they may take place at local, regional, national or European level.

RECOMMENDATION 1: Change focus to mental wellbeing

Focusing on the positive aspects of mental wellbeing (physical and mental integrity), which is neglected in current evidence dedicated primarily to mental health issues or disorders, is a critical re-conceptualization that must be advanced to support the mental health of essential workers in a cost-effective manner.

Action point 1.1.: Re-conceptualize the discussion into mental wellbeing

The primary focus should be on promoting the positive aspects of mental health and how to promote, maintain, or restore them. We will use the terms mental wellbeing and mental health interchangeably.

This action point is directed at all decision-makers at all levels and sectors.

Policy makers should create this paradigm shift to re-frame/re-direct mental health discussion and foster national policy development and research efforts to align with it.

RECOMMENDATION 2: Treat mental wellbeing as an inherent part of the organisation

Mental illness symptoms may manifest in cognitive, emotional, behavioural, and/or physical (or bodily/somatic) ways. Symptoms are subjective in nature. Understanding of mental health and mental illness lags far behind our understanding of physical health. Assessment of positive mental health is even more challenging, requiring explicit efforts at this moment.

Organisations (health care providers, providers of essential services) should treat the provision of adequate environment for promotion of mental wellbeing of workers as major occupational safety dimension, including a psychologically safe environment.

Organisations should be able to routinely detect “warning signals” for loss of mental wellbeing in workers and, eventually, the emergence of mental health issues and disease that need help from a health professional.

The term “organisations” covers health care providers and providers of essential services. It includes government bodies and units, private for-profit companies, non-profit companies, charities, etc.

Action point 2.1: Have a mental wellbeing plan

Organisations should have a plan to address mental wellbeing of workers. This plan needs to support the entire spectrum of mental health (from promotion of protecting factors to sensitivity and timely action to “warning signals” at individual level as well as changing workplace hazards that may cause psychological harm to workers). This action point is directed at senior managers of all organisations with a high share of essential workers.

It is important for organisations to develop a process to detect “warning signals”. These signals would lead to a more in-depth mental health assessment and eventually diagnosis and treatment of mental illness or mental health promotion and prevention activities. Warning signals are to be produced at the organisation level, while mental health assessment is performed at the individual level. This requires that assessment tools are in place, preferably keeping the individual process confidential. On this, the use of digital tools, by introducing distance between who is assessed and the organisation, creates a psychologically safe space that can be helpful to reduce the stigma and visibility to others of the assessment.

Organisations should establish monitoring and reporting of indicators reflecting on wellbeing (positive mental health) as well as problems in organisational culture/workload etc, and act on them. These indicators should be selected from a set of indicators to be made available at EU-level to ensure the same principles are applied uniformly, allowing for comparability and relative evolution.

Action point 2.2: Report on mental wellbeing

Organisations are to report, in a transparent way, on the internal mental wellbeing environment, using common indicators (see Recommendation 3). Organisations are to keep the detailed results of these indicators confidential but provide mechanisms to ensure to an outside inspectorate that the system is being used. This action point complements action point 1.1. It is directed to senior managers of organisations with a high share of essential workers (on the reporting duty) and to Government officials in the health sector (on the monitoring of this report by each organisation). The involvement of Government officials may be minimal, for instance to check that the report is publicly available. Penalties may apply if organisations do not report, though, as a first step, a positive acknowledgement of these reports is preferred as an incentive mechanism for adherence).

Action point 2.3: Identify workplace hazards to mental wellbeing

Develop and improve protocols and standards for organisations to identify workplace hazards to mental wellbeing so that they are managed in a manner consistent with other occupational health and safety risks. This can build on the experience of the European Agency for Safety and Health at Work. This action point is directed for those responsible for health policies, both at national and EU level. Coordination at EU-level is desirable to ensure consistent practice. National implementation will adjust better to local culture.

Organisations should be made aware of the relevance of changing internal culture and have the corresponding tools/approaches/instruments for effective handling of mental wellbeing of workers in place. Organizations could evaluate the risk for negative work-related mental health consequences. Organizations should provide psychologically safe environment and provide positive support to individuals with pre-existing mental health

conditions and in collaboration with the individual and a multidisciplinary occupational medicine team develop a specific plan to mitigate stressors at individual level.

Action point 2.4: Ensure that organisations of all sizes participate

This may require providing tools to the organisations that are too small to develop their own solutions. The use of digital tools is promising. This action point is mainly directed at EU-level decision makers in a first step. There are obvious gains from avoiding duplication of work. National language implementation should be taken by national decision makers. This bridges health, employment and digital areas of public policy.

At the country or regional level, the appropriate public entity should provide digital tools or other appropriate widely deployable solutions for Small and Medium Enterprises (SMEs) and organisations to have a minimum level wellbeing plan of workers in place. These tools are at level of the organisation and they are not individual intervention tools. It may be helpful to design a digital tool at EU-level to help small and medium organisations to adhere to the tools with minimum cost. Large organisations need to ensure interoperability of their own tools and information systems with this EU-level digital tool.

Action point 2.5: Create a Charter of Rights to Wellbeing at the Workplace

Create an EU-level norm, Charter of Rights to Wellbeing at the Workplace (or some other name) to set a norm, with observable elements for public opinion, that organisations will treat employees well. This action point is directed at EU-level decision makers.

This Charter of Rights would provide transparency and include accountability to care for employees' health as part of its effects. The elaboration of the Charter of Rights to Wellbeing at the Workplace should make explicit reference to the EU Charter of Fundamental Rights, to the European Pillar of Social Rights and to the Universal Declaration of Human Rights.

RECOMMENDATION 3: Create a supportive environment at EU-level

There is a clear need for policy developments to embed workplace mental health interventions geared towards the promotion, prevention, and support of mental health at work and the management of work-related psychosocial risks. This has been endorsed by the European Council in its conclusions on Enhancing Wellbeing at Work. The document also invites Member States and the European Commission, in accordance with their respective competences and taking into account national circumstances, whilst respecting the role and autonomy of the social partners, to include the perspective of wellbeing at work horizontally into relevant national and Union policies. In this respect, in the context of the EU Strategic Framework for Health and Safety at Work (2021-2027)¹⁶¹, the European Commission has agreed to launch an "EU-OSHA healthy workplaces campaign" 2023-2025 on creating a safe and healthy digital future that

will cover psychosocial risks in particular. The Commission will prepare a non-legislative EU-level initiative related to mental health at work, in cooperation with Member States and social partners. Furthermore, it will develop the analytical basis, e-tools and guidance for risk assessments related to green and digital jobs and processes, including in particular psychosocial risks. In addition, it calls on Member States to host 'peer reviews' addressing occupational psychosocial issues. Finally, the Commission invites social partners to take action and update existing agreements at cross-industry and sectoral level to address new OSH issues related to the digital labour market, particularly psychosocial risks, by 2023. We expect that mental wellbeing will be addressed through these and other initiatives.

Action point 3.1: Protect mental wellbeing in labour market legislation

Include mental wellbeing and mental health protection as part of legislation changes addressing employment conditions and social protection. This action point is directed at national decision makers responsible for public policy regarding employment and workplace conditions.

The mental wellbeing and mental health of the health workforce and essential workers needs to be addressed by workplace general conditions, and as such supportive interventions outside the health care sector, and related to labour market conditions, are required.

Action point 3.2: Set an EU-level mechanism to measure wellbeing of workers

An EU-level entity should publish a set of indicators on mental wellbeing, defined at the organisation level. The information should include definition of wellbeing, each indicator and how to compute them with the least possible cost to organisations, small and large. This action point is directed at EU-level decision makers.

The definitions need to ensure that data collection and indicator computation cover the same dimensions and have the same meaning everywhere. These indicators should include Mental Health Person Reported Outcome Measures with a clear definition, to make information comparable over time and (eventually) over organisations.

The possibility to set research funding at EU level for explicit work on the development of the measures to be adopted is to be considered. There is currently a wealth of information in some countries that can be translated to other languages. Some new measures may have to be created. Providing a common set of concepts and ensuring they are understood in the same way everywhere is a necessary step. A review of existing indicators, their breadth of scope, common understanding and their usefulness should be done.

Action point 3.3: Develop reliable screening tools

Self-assessment and organisational assessment tools are needed. These should be tools that the people may use for themselves to assess their personal mental wellbeing status

and, in particular, the resulting degree of functional impairment. The tools would include clear messages on how to strengthen positive mental health and identify when and where to seek the help. This action point is directed at those responsible for health policies at national level, though a coordination role to ensure consistency and comparability across geographies is desirable.

Action point 3.4: Ensure accountability

Clearly define, at each decision level, EU and national/regional, who owns the role of promoting and monitoring mental wellbeing initiatives. It can be either a new entity or an entity that already oversees workplace conditions and employment contracts resolution (for example). This action point is directed at EU and at national decision makers in the area of health and employment policies. Different countries may decide for different solutions that ensure similar final outcomes regarding accountability.

Action point 3.5: Provide guidance on “mentally protective” workplaces

Build an EU-level handbook on how to prepare a “mentally protective” workplace, and update it regularly (every two years, at least) based on the latest evidence. National and regional specific elements may be recognised, added by national entities of Member States. This action point is directed at EU-level decision makers.

This handbook should help organisations to have a good internal process without being too normative (or trying to micromanage every single organisation, which would certainly fail). It should cover from definition to communication and to implementation. It should help organisations to strengthen and/or develop processes to support positive mental health, and avoid internal stigma and discrimination associated with mental issues. It should help in building a supportive environment and building on eliminating harassment (and gender-based harassment) in the workplace. Gender harassment in the workplace should be treated as one organisational dimension of promotion of mental wellbeing.

Action point 3.6: Continue to promote and strengthen further EC and Member States collaboration

Support from the EC to those - existing or future - initiatives of collaboration between countries regarding the mental health of healthcare workers or essential workers in general, such as the "Practitioners Health Provider Network", is desirable.

This action point is directed at the EC decision makers.

RECOMMENDATION 4: Create an appropriate cost-effectiveness methodology

Cost-effectiveness of interventions in mental health are mostly inconclusive and most have methodological limitations to the generalisation of results. Cost-effectiveness needs only to be explicitly considered for interventions involving public funding or public decisions over use of resources. If outcomes to be met are defined, organisations will do

their internal assessment on the best way to reach them (they will do their own internal cost-effectiveness analysis, even if not formally being named that way).

Cost-effectiveness analysis of interventions in mental health are particularly difficult to perform due to the time horizon of those interventions (outcomes may take years to materialise) and due to the difficulty in establishing a precise causal link from intervention to mental health outcome (interventions are often tailor made to each individual, based on unobservable factors, such as organisation culture, peer support, empathy with health care provider and trust in the relationship by the patient). Also, the perspective adopted in cost-effectiveness analysis has to recognise the existence of spillover effects from mental health interventions outside the health sector. Thus, the societal perspective is enlarged and the payer perspective (public sector – national health service – in some countries) is too narrow to account for all relevant benefits. In particular, considering the impact on the labour market of a mental-health related intervention, the common use of measures such as Quality-Adjusted Life Years may not be adequate.

The general presumption obtained from existing studies and meta-analysis is that prevention interventions are generally cost-effective compared to non-prevention.

Action point 4.1 Set a specific research programme

The objective is to develop a specific methodology of cost-effectiveness (cost-benefit) analysis of mental health interventions at all levels, having in mind all the specifics of the interventions, and that accounts for person-specific treatment plan (recognise that every treatment is different versus the standardised nature of other health interventions) and the long-time horizon of interventions (time to benefits manifestation).

This action point is directed at EU-level decision makers in both areas of health and scientific research.

Economic evaluation should be promoted in the field of mental health. Literature is very scarce on this issue, probably for good reasons of data availability and the challenges outlined above. It is necessary to recognise, in methodologies used and in decisions, that many interventions that may not be cost effective for the organisation may be so for society. Public decisions may require a cost-effectiveness analysis to back them even if there is little or no public funding involved.

RECOMMENDATION 5: Build and share knowledge on interventions, further developing current initiatives

Build robust evidence-based knowledge on interventions and mental wellbeing programmes to take place at organisations. The knowledge base must result from a

careful critical assessment and emphasis should be placed on patient values being included in the assessment.

Those responsible for developing intervention programmes should utilize a “swiss cheese” approach in which complex evidence-based interventions are used to address a complex issue. A combination of interventions addressing different protective and risk factors and targeting different vulnerable and non-vulnerable groups at different levels (individual, organizational, community, societal) can help ensure comprehensive coverage so that “no-one is left behind” or “falls through the cracks” (holes).

Action point 5.1: Promote research

Provide research funding to help build a high-quality knowledge base, filling the gaps in current research results. This action point is directed to both EU-level and national decision makers in health and employment (workplace safety) policies.

The effort to build a knowledge base must focus research on protective factors that may help ensure quick and effective recovery after exposure to stress (harm-reduction approach), protect against adverse mental health outcomes prior to stress (protection approach), and/or promote positive aspects of mental wellbeing. They may be highly context/culturally dependent and may change over time. Potentially identify them not at individual level but for specific group of people, such as specific group of (essential) workers. Research to produce evidence needs to be able to provide an understanding of what matters, how it matters and how much it matters. Develop evidence on interventions on how people work in teams, to mutually support positive mental wellbeing (peer-support).

It needs to ensure that the evidence-based body of knowledge includes a) outcomes at individual, organisation and population levels, b) detailed analysis of vulnerable groups; c) information on actual use of tools made available by interventions.

There is a need to develop survey tools that better distinguish mental illness from distress and measure the types of difficulties that need intervention.

The activation of this recommendation must develop and promote use of mixed approaches (qualitative and quantitative) in both implementation and evaluation of mental health programs and interventions, having clear targets at the organization level.

It is also appropriate to predict adequate funding for pilot innovative mental wellbeing programs and interventions, with well-prepared evaluations, in order to build an evidence-based body of knowledge regarding effective interventions and prevention strategies. This can be done at national and/or at EU-level.

Action point 5.2: Build conditions for effective interventions

Create and foster the conditions for innovative and effective interventions and mental wellbeing programmes to take place at organisations. Promote comprehensive interventions with the involvement of management structure, primary healthcare and

community stakeholders. This action point is directed at national decision-makers responsible for health and employment.

RECOMMENDATION 6: Having a shared EU-wide view of mental health care

Continue to build a harmonised view, across Member States, of mental wellbeing promotion and of basic mental health care for individuals with mental illnesses.

There is need to ensure that all member states share common values that support mental wellbeing promotion and adequate and timely access to health professionals when needed by the health workforce and essential workers. This also means a more general support to the change process to community mental health services (more advanced in some countries than in others).

EU-level action should continue to help Member States and regions to learn from each other on effective best practices. Support and develop further a EU-level "learning community" for exchange of 'best practices' on increasing mental health resilience on healthcare workers and other essential workers. Promote learning in action, involving learning through engagement.

This effort should involve regional authorities (governance bodies), local administrative bodies (municipalities) and other local authorities in order to explore joint actions and strengthen community coalitions and supportive synergies. It should also promote actions for a better exchange of proposal and ideas between European scientific societies and those that represent occupational medicine, mental health practitioners, public health, general practice and primary care, and other clinical and non-clinical disciplines (including psychology, social work, anthropology, among others).

Action point 6.1: Take actions to implement and create demonstrable effect

At EU-level, identify low-cost but effective interventions that can be implemented quickly by member states that find themselves with limited capacity to provide mental health services. This action point is directed at EU-level decision makers in health and employment.

As a complementary effort on the building of a general EU view, a useful tool can be a EU seal of excellence for mental wellbeing protection.

RECOMMENDATION 7: Prepare organisations and their leaders

Mental health and work-related psychosocial risks need to be firmly embedded into corporate risk management and business operations.

Action point 7.1: Improve leadership

Train leaders of health care organisations on fostering positive mental wellbeing in their organisations and long-term thinking (instead of short-term emergency reactions). This action point is directed to national decision makers, covering health, employment and education (higher education in particular) policies.

Action point 7.2: Prepare for the job

Provide guidance and training on how healthcare organisations can actively “prepare staff for the job”. Guidance should be provided on identification of the moment to do it, and on what should be said and how. Address explicitly how organisations anticipate and prepare on burnout, moral injury, post-traumatic stress disorder and depression. This action point is directed at national decision makers.

Action point 7.3: Provide support in emergency situations

Prepare mechanisms to activate support in emergency situations to the health workforce and essential workers. This action point is directed at national decision makers and senior managers of organisations with high shares of essential workers, to collaborate on the identification and definition of best practices.

Define mechanisms by which psychological support can be given during a crisis, and is known in advance that will be available. Those mechanisms need to account for different needs and capacities of small and large organisations to cope with demand. Moreover, those mechanisms need to account for the specific risks that frontline workers face. Also, define mechanisms by which professional support can be given during a crisis, and is known in advance that will be available. Those mechanisms should include, according to evidence, helplines and consultation from trained professionals. Finally, define mechanisms by which support to family life of essential workers can be given during a crisis and is known in advance that will be available. The support can include free transportation, accommodation and childcare. Provide stress management training to essential workers.

This recommendation can be associated with a certification. Other possible ways to operationalise this recommendation include promoting the development and use of occupational (digital) mental health interventions, as well as redirecting to health care services when appropriate, and activating leadership to be aware of early warnings. To ensure that timely and adequate action takes place, focus on: (i) organisation changes, to eliminate workplace hazards detrimental to mental health, (ii) at the individual level, an appropriate and timely channelling to healthcare/diagnosis takes place if needed. Organisations can review and build upon existing toolkits. As an example, the CHRODIS toolkit has helpful recommendations that are easy to implement, and low cost actions.

Action point 7.4: Train for the long term

Human resources management training and curricula should develop explicit mention and work with mental wellbeing of workers. Continuous professional development should incorporate mental wellbeing concerns. Responding to mental illness requires a structure different to that of addressing conditions for safe mental wellbeing. Improve and develop mental health literacy in organisations by educating (all) professionals/workers. This

action point is directed at national decisions makers in the education sector. Collaboration from policy makers from the health sector is necessary.

RECOMMENDATION 8: Provide timely and adequate access to care

Mental illness needs to be addressed within the health and social care system, after proper diagnosis is made.

Action point 8.1: Communicate properly within the health system

Ensure that adequate communication from organisations to health care services exist, so that diagnosis and (eventually) treatment takes place. Communication should be done in a way that avoids stigma and it is compliant with data protection (as detailed in the GDPR). This action point is directed at senior managers of organisations with high shares of essential workers.

Action point 8.2: Develop new solutions

Develop the profile/role of 'primary care community psychologist', that works at societal, organisational and individual level. This action point is directed at national decision makers in health policies. International coordination is necessary to ensure consistency of solutions across the EU.

In conclusion, even prior to the COVID-19 pandemic, the case for effectively managing psychosocial risks was already clear. The EU, Member States and organisations should regard mental health and wellbeing at work as part of a holistic approach to health and safety that also considers psychosocial risks. Leadership for change is required at all levels – from EU decision makers, to national policy regulators, to senior management in organisations, to mental health practitioners and occupational health practitioners. Such actions are imperative to more effectively support the mental health of the health workforce and other essential workers, beginning now and for the future.

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