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Action required to address the impacts of the COVID-19 pandemic on mental health and service delivery systems in the WHO European Region

Recommendations from the Technical Advisory Group on the Mental Health Impacts of COVID-19 in the WHO European Region

30 June 2021

ABSTRACT

These recommendations from the Technical Advisory Group (TAG) on the Mental Health Impacts of COVID-19 in the WHO European Region represent the work of the TAG between February and June 2021. At its second meeting on 23 March 2021, the TAG agreed to frame the recommendations across three key areas of impact: general population and communities; vulnerable groups; and public mental health services. Draft recommendations for each thematic area underwent two rounds of discussion at the third and fourth TAG meetings, held respectively on 23 April and 28 May 2021. The recommendations are endorsed by the TAG as representing the best available evidence and expert advice on the mental health impacts of COVID-19 and associated opportunities for action.

Keywords

MENTAL HEALTH
COVID-19
EUROPEAN REGION
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Technical Advisory Group on the Mental Health Impacts of COVID-19 in the WHO European Region

At the request of the WHO Regional Director for Europe, a technical advisory group (TAG) was established in February 2021 to provide advice and guidance to Member States of the WHO European Region and other interested parties on the key mental health impacts of the COVID-19 pandemic, and to suggest critical actions to be taken by national authorities in response. The TAG is independently co-chaired, and members comprise scientific experts in the field of COVID-19 and mental health, frontline service providers and managers, mental health service users, family advocates and COVID-19 survivors (see Annex 1 for TAG members and observers). Possible conflicts of interest are reviewed and managed by the Secretariat at the WHO Regional Office for Europe (see Annex 1); no conflicts of interest were observed.

The specific terms of reference for the TAG were to:

1. review available evidence on the mental health impacts of the COVID-19 pandemic in the WHO European Region at three distinct levels:
    a. population level (to estimate rates of mental ill health and associated factors)
    b. policy and service level (to document policy responses and service disruptions)
    c. individual level (to understand the human cost and how to cope with adversity); and
2. identify remaining gaps in the evidence base and key emergent needs and implications for mental health service development and system strengthening as an integrated component of COVID-19 response and recovery.

A detailed review of the available literature on the mental health impacts of the COVID-19 pandemic in the WHO European Region (and beyond) was commissioned by the WHO Secretariat and prepared by an international expert (Dr Jonathan Campion, Director for Public Mental Health, South London and Maudsley NHS Foundation Trust, United Kingdom) as a background paper to support the work of the TAG. The recommendations set out in this report represent the work of the TAG between February and June 2021. The first TAG meeting, held on 23 February 2021, introduced the context to, and process for, the TAG's work. It provided an opportunity to review the current situation and evidence with respect to mental health impacts of COVID-19 and identify key concerns and issues for further consideration and discussion. At its second meeting, on 23 March 2021, the TAG agreed to frame the impact assessment and related policy recommendations across three thematic areas:

1. mental health impacts on, and needs related to, the general population and communities
2. mental health impacts on, and needs related to, vulnerable groups
3. impacts on, and needs related to, public mental health services.

Drafting of recommendations for each thematic area was entrusted to three subgroups that were formed according to expertise profiles and individual preferences of the members. Draft recommendations underwent two rounds of discussion at the third and the fourth TAG meetings, held respectively on 23 April and 28 May 2021. The recommendations are endorsed by the TAG and reflect the best available current evidence on the mental health impacts of COVID-19 and associated opportunities for action. The TAG acknowledges that the evidence base is constantly evolving and remains incomplete for many areas and latest phases of the pandemic; it also notes that much of the evidence comes from a relatively small number of (mainly high-income)

countries. **The recommendations represent the views and points of agreement of the TAG experts and do not necessarily denote WHO's position or recommendations on these issues.**

Mental health and the COVID-19 crisis

The COVID-19 pandemic has shaken the world. An unimaginable number of lives and livelihoods have been lost, families and communities forced apart, businesses bankrupted and people deprived of opportunities that little more than a year ago were taken for granted. These consequences of the pandemic have exacted an enormous toll on the mental health and well-being of the population. Everyone's mental health has been affected in some way, whether as a result of infection or worry about becoming infected, or the stress brought about by infection prevention and control measures such as lockdown, self-isolation and quarantine, or the detrimental effect on mental health associated with lost or reduced employment, income, education or social participation. Early reports on COVID-related psychological distress quickly led the United Nations to release a policy briefing which warned that a "long-term upsurge in the number and severity of mental health problems is likely" (United Nations, 2020). Mental health conditions are common, result in broad impacts for individuals and populations, and are associated with suffering and functional impairment.

The extent of psychological impacts on individuals, families and communities has been determined by the level of transmission of SARS-CoV-2 (the virus that causes COVID-19), the extent of containment and mitigation measures, the home or work environment people found themselves in, and predisposing factors or vulnerabilities at individual and community levels that varied between countries of the WHO European Region. Specific groups in the population that have been put at particular risk of, or vulnerability to, adverse mental health outcomes as a result of disrupted or impeded service access, diminished social connectedness or restricted economic activity include migrant and refugee populations, health- and social-care workers, children and adolescents out of school, newly unemployed workers, older adults confined to their place of residence, and people with pre-existing mental health conditions and psychosocial, cognitive or intellectual disabilities.

The public health challenge that has been faced by all countries is how appropriately to address the increased psychosocial needs of the population at large and the needs of specific affected groups at a time when service availability or continuity was disrupted and certain modalities of care – such as long-term residential care in mental health institutions or social-care homes – were compromised by the enforcement of unprecedented containment and mitigation measures aimed at preventing and controlling the spread of the epidemic in populations.

It is important to note that prior to COVID-19, only a minority of people with mental health conditions across the WHO European Region received any treatment, with far less coverage of interventions to prevent mental health conditions or promote mental well-being and resilience (WHO Regional Office for Europe, 2019). Reasons for the implementation gap include long-standing low prioritization and under-resourcing of mental health systems and services, weak governance and fragmented service delivery, and inadequate levels of service quality, including in psychiatric hospitals and other long-term institutions. Stigma, costs and lack of motivation in patients are also important causes of the low uptake of services. These challenges have been exacerbated by the current crisis, which has contributed to a widening of the mental health treatment gap and to a disproportionate impact on the health and well-being of people with mental health conditions and psychosocial disabilities.

Mental health impacts of COVID-19 and needs related to the general population and communities

Impacts

The outbreak and rapid spread of a novel coronavirus disease across the European continent in the early months of 2020 quickly raised fears and anxiety among people that they or those dear to them could become infected, potentially very sick or die. Over and above this direct threat to their health, public health measures, including contact restrictions, physical distancing, cancellation of group events and gatherings, wearing of masks and strict hygiene measures, home confinement, contact-tracing, quarantine and isolation, travel-related restrictions and closures of, and restrictions in, public institutions, including schools and businesses, were rapidly introduced to curb community transmission. For many, the resulting lack of connectedness and reduction in opportunities to interact led to feelings of loneliness, fear and pessimistic perspectives for the future (Wang et al., 2020; Varga et al., 2021) and an increase in psychological distress and symptoms of depression and anxiety (Kunzler et al., 2021a). The imposition of these public health containment and mitigation measures resulted in far-reaching social and economic impacts, including widespread losses of employment and income and increases in impoverishment, social exclusion and inequalities.

As the pandemic moves into a second year, more data on the psychological burden it imposes have emerged. For example, a large multi-wave survey across the European Union that set out to investigate the impact of COVID-19 on health and well-being, work and financial situations observed a decline in mental well-being since summer 2020, measured using the WHO-5 mental well-being scale (0–100), especially among those who had lost their job (Ahrendt et al., 2021). By spring 2021, the survey showed an overall increase in negative feelings, such as tension/anxiety, loneliness, and feeling downhearted and depressed, across most social groups. Other longitudinal studies show a marked increase in levels of distress, anxiety and depression in the early phase of the pandemic followed by regression to pre-pandemic levels (Robinson et al., in submission). A review of 23 multi-wave studies similarly found that mental health problems increased during lockdown then decreased slightly after lockdown (Richter et al., 2021). A further review of studies looking at the impact of lockdown measures found they had a small overall effect on mental health symptoms at population level, but non-significant effects on positive psychological functioning (Prati & Mancini, 2021).

Fear of losing one's job, pay cuts, lay-offs and reduced benefits made many workers question their future (International Labour Organization, 2020). As shown by earlier studies, lack of access to either employment or good-quality employment can decrease quality of life, social status, self-esteem and achievement of life goals (McDaid & Park, 2014). Job insecurity, economic loss and unemployment can have a severe impact on mental health (Lund et al., 2018). Unemployment is a major risk factor for mental health conditions, including suicidal thoughts and behaviours, as well as completed suicide (Milner et al., 2013; Kim et al., 2016). Mental health issues contribute to reduced work performance, absenteeism, presenteeism, staff resignations, higher turnover and increased possibility of human error (WHO, 2020a). Remote work settings also have differential consequences on mental health. Despite generally beneficial effects on psychological well-being, a remote work environment may lead to elevated stress and emotional exhaustion in teleworkers (Charalampous et al., 2019; Oakman et al., 2020).

Mitigation strategies to contain the pandemic in many countries have also included school and university closures, transferring basic and advanced education to a remote learning setting and leading to a further decrease in social activities and interactions (Brooks et al., 2020). This can impact psychological well-being, resulting in feelings of loneliness, and can lead to affective and behavioural problems in children and adolescents (Panda et al., 2021).

Home confinement, contact restrictions, home schooling and remote working have affected family functioning (Arhendt et al., 2021). Possible consequences are constraints regarding the boundaries between work and family life (work–life balance), child anxiety and parental stress and anxiety (Fong et al., 2020; Oakman et al., 2020). The loss of loved ones due to COVID-19 should also be considered an essential factor for family distress (Stroebe et al., 2021).

Populations need to be sensitized to the fact that the pandemic has psychological effects, and low-threshold preventive interventions should be provided to improve resilience. More reliable studies on the precise impact of COVID-19 on mental health are also needed, since little is known so far, especially regarding long-term effects. There is considerable scope to improve the evidence base relating to effective psychosocial interventions in the context of pandemics, as the number of available studies is insufficient to guide decision-making and action in the current pandemic (Kunzler et al., 2021b).

Recommendations

Recommendation 1. Countries should promote and enable access to culturally adapted, evidence-based interventions for mental health and psychosocial support[1] through digital and other means, including interventions to increase resilience and help people cope with stress and loneliness.

Lockdowns and isolation requirements have disrupted people's lives and livelihoods, resulting in increased population levels of stress, depression and loneliness, although longitudinal studies appear to suggest that mental health impacts may be temporary. Low-threshold, low-cost and evidence-based interventions can be used for support with these disruptions and are recommended for dissemination (Fischer et al., 2020; Wolf et al., 2021; Williams et al., 2021), including: self-guided interventions (digital or otherwise); home-based activities (such as physical exercise, yoga and progressive muscle relaxation); low-threshold psychoeducation about the mental health risks of the pandemic (including online tools); interventions aimed at improving resilience and addressing loneliness (such as neighbourhood help); and telephone helplines, both in general and for specific groups. Sports, arts and other community organizations can also be promoted and strengthened to engage with and support people from all age groups, but especially young people, and those who are distressed or socially isolated (Meherali et al., 2021). Cultural adaptation of such interventions is required to optimize uptake and effectiveness and account for cultural and contextual circumstances, including the preferences of target groups and populations.

Recommendation 2. Countries should promote, support and embed psychological support initiatives in the workplace, and provide occupational and/or financial support to those prevented from or not working, or in the process of returning to work.

[1] The composite term mental health and psychosocial support is used in the Inter-Agency Standing Committee (IASC) *IASC guidelines on mental health and psychosocial support in emergency settings* to describe "any type of local or outside support that aims to protect or promote psychosocial well-being and/or prevent or treat mental health disorder" (IASC, 2008).

The pandemic has changed most workplaces considerably and has had a huge economic impact on companies and employees. More than ever, it is now important to provide organizational support (such as performance assessment and ensuring employees have adequate workloads), co-worker support (including sharing of tasks and regular communication), technology support (particularly the provision of adequate equipment), boundary management support (with clearly defined working hours) and support to address gender inequities in the workplace. Occupational health services, including mental health and psychosocial support, workplace supportive policies (on, for instance, occupational safety and health and human resources) for workers and interventions to prevent work-related stress and promote mental well-being and resilience are needed, particularly for young workers, older workers, female workers, frontline workers and workers from vulnerable disadvantaged groups, including precariously employed people and employees returning to work after experiencing mental health issues or after sickness absence related to mental health. Unemployment has detrimental effects on mental health and is associated with depression and suicidality. Employment can contribute to maintaining and fostering people's abilities to contribute to society and buffer the normal stresses of life, thereby contributing to good mental health. It is important to provide occupational and/or financial support to those prevented from or not working.

Recommendation 3. Countries should address the social determinants of mental health, including poverty, unemployment and socioeconomic inequalities, through targeted actions to provide financial support to households in or at risk of impoverishment as a result of income loss or unemployment, including sickness absence payments for those temporarily unable to work.

The economic consequences of the COVID-19 pandemic are not yet completely clear. They have not been fully realized and will vary across countries of the WHO European Region. Rates of unemployment and the risk of impoverishment, which are well established risk factors for mental ill health, are projected to increase substantially (Patel et al., 2018; World Bank, 2020). For those affected by unemployment and loss of income, it is important to initiate or maintain financial support to bridge the income losses and provide support for finding new employment. Such measures will have a direct effect on risk for mental health problems and its antecedents, including childhood adversity (Eurochild, 2020; Organisation for Economic Co-operation and Development (OECD), 2020a).

Recommendation 4. Countries should monitor changes in mental health at population level through valid, standardized and comparable measures and instruments.

As the post-pandemic period evolves in so far largely unknown ways (OECD, 2021), the impact of the recommended interventions needs to be measured, and the expected reduction of psychological distress and improvements in mental health in populations monitored over time. It is important that mental health and resilience capacity is monitored continuously (both during and after the pandemic) not only at population level, but also in specific high-risk groups, such as adolescents and young adults, older adults, migrants and refugees, and people with long-term health conditions or disabilities.

Groups particularly affected by the mental health impacts of COVID-19

Impacts

The pandemic has had an impact on everyone, but some groups in society have been affected disproportionately. It is important that these groups are identified and policy measures put in place to reduce the consequences for them, lessen their risk of developing mental health problems and prevent further widening of inequalities. This relates to a very wide range of population groups that include children, adolescents, older adults (particularly those living in log-term institutional care or confined to their place of residence), women (many of whom have assumed greater caring and educational roles during the pandemic and who may be more at risk of unemployment), migrants, refugees and displaced people, health- and social-care workers, newly unemployed workers, people with long-term health conditions or disabilities or those with pre-existing psychosocial, cognitive or intellectual disabilities. Some of these groups were already at higher risk of mental ill health before the pandemic.

Defining vulnerable persons or populations at risk is a theoretical and practical challenge; for the purposes of this report, the TAG was guided by emerging as well as available evidence from the scientific literature (reviewed in the background paper prepared for the TAG) plus the lived experience of TAG members. While acknowledging the limitations of the approach, the group, aiming to be as inclusive as possible, took into account burden of disease and impact in the short and long terms, and also selected priority groupings. As evidence emerges, these priorities may change.

Recommendations

Recommendation 5. Countries should promote, communicate and increase access to socioemotional learning, educational support for learning loss and mental health and psychosocial support in schools and universities, and provide more community support for adolescents and young adults.

Research is making it increasingly clear that the pandemic has had serious consequences for children, adolescents and young adults. Over long periods of time, they have had their essential social contacts restricted, missed experiences for healthy development and lost parts of their education. Key elements for inclusion in education – feelings of self-worth and connection to school – have been affected by school closures (OECD, 2020b). Given evidence that school failure is a major risk factor for mental health problems, the negative impacts of school closures and distance learning on education present causes for concern that need to be addressed (Gustafsson et al., 2010; Viner et al., 2021).

Systematic reviews (Loades et al., 2020; Nearchou et al., 2020; Meherali et al., 2021) and large follow-up surveys (such as that completed by NHS Digital (2020)) have shown that depression, anxiety, stress, worry, social isolation and loneliness have increased. Behavioural issues may have worsened in children with pre-existing behavioural problems such as autism and attention deficit hyperactivity disorder. Although almost all studies had a cross-sectional design (Panda et al., 2021), changes with respect to pre-pandemic levels seem appreciable.

Measures to strengthen the resilience of children, adolescents and adults should be based on factors that have been identified as being risk or protective factors for mental disorders. In this

sense, ensuring school education, a school-leaving certificate and successful vocational training or studies can be conducive to mitigating negative long-term effects, as can financial or non-financial support (such as access to digital literacy tools) for families who are unable to create the necessary conditions (a good economic situation is a protective factor for psychological consequences of the pandemic). As social support has been shown to be a protective factor in the pandemic (Gilan et al., 2020) and people in the pandemic feel most burdened by missing leisure activities and reduced social contacts (Veer et al., 2021), young people should be encouraged and supported to participate as much as possible in social life, school, training, studies or leisure activities (see also recommendations of the TAG on safe schooling during the COVID-19 pandemic (WHO Regional Office for Europe, 2021)). Increased access to socioemotional learning opportunities and mental health support, promoted as appropriate through social media and other channels, is especially needed in these groups. The TAG further notes that it is important to avoid medicalization of the problems of adolescents and young people.

Recommendation 6. Countries should promote and enable access to mental health and psychosocial support for individuals directly affected by COVID-19 disease.
COVID-19 can have severe consequences for affected individuals and their families, having profound effects not only on the bodies, but also on the minds of affected people. It can have an impact on death anxiety, bereavement after the loss of a loved one, and may bring severe consequences for those living with the long-term impacts of the disease. Preliminary research shows that mental health problems are likely to be increased in those experiencing COVID-19 (Rogers et al., 2020; Vindegaard & Benros, 2020). Access to treatment for mental health problems or conditions therefore is needed for individuals directly affected by COVID-19 and their families. Services could include teletherapy and support, low-threshold access to parental and child mental health services, and facilitated access to, and use of, existing services and community-level interventions.

Recommendation 7. Countries should develop, communicate and put in place emergency preparedness guidance for people with disabilities and in long-term care, and ensure continued access to, and facilitated provision of, quality care and support.
Frail older adults, people with long-term conditions and those living with a disability[2] have experienced reduced or missing services alongside limitations in informal support during the pandemic. They are at risk of having reduced care in the future and are often particularly affected by increasing social inequality (Manca et al., 2020; Office for National Statistics, 2020). All of these stressors have an impact on mental health.

Increased mental health problems can complicate existing physical impairments, and vice versa. People with pre-existing mental health conditions often have received reduced health care during the pandemic (Neelam et al., 2021) as resources in health services have been directed towards care for people with COVID-19 and intensive care facilities. These people, who are often particularly affected by economic difficulties and social isolation, are at risk of being further disadvantaged and of losing out in the future if sufficient resources for mental health services for people with mental health conditions are not secured.

It therefore is important that every country develops a pandemic response plan to protect vulnerable populations and ensure that inequities are not exacerbated. This may include, but is not limited to, an emergency preparedness guide for people with disabilities and people residing in long-term or institutional care settings, access to telehealth interventions and online support. It

[2] It is recognized that this categorization includes people with a wide range of conditions and disabilities.

is also important that services for people with mental health conditions are protected and, where possible, increased, including through financial support to community-based patient/family organizations that provide empowerment and support services. Because of the direct and indirect consequences of the pandemic for people with disabilities and those in long-term-care settings, these groups should be prioritized for COVID-19 vaccination.

Impacts on (and needs related to) mental health services

Impacts

Since service capacity and coverage for people with mental health conditions was already low prior to the COVID-19 pandemic (WHO Regional Office for Europe, 2019), this meant that mental health services were not in a position to respond to sudden increased demand.

The COVID-19 pandemic resulted in many immediate direct and indirect impacts on the capacity to deliver mental health services and support, including prevention, treatment and rehabilitation. Rapid over-burdening of local and even national health care systems followed the initial outbreaks, with significant re-purposing of health- and social-care workers away from their normal roles (including provision of mental health services) towards COVID-19-focused activities. Mental health services were also hampered by public health restrictions that limited the provision of face-to-face services (WHO, 2020b). Services were affected by temporary suspensions and restarts, with barriers to in-person support and a need to move towards the rapid adoption of new or alternative forms of remote service delivery, such as contacting service users through teleconferencing or digital self-help. Together with the increased demand for services, disruptions to established service modalities and working conditions placed new levels of stress and pressure on the mental health- and social-care workforce, thereby making their health and mental well-being a priority concern in its own right.

There is a clear necessity in all national health systems to address mental health conditions in people affected by COVID-19, most notably symptoms of distress, anxiety, depression and post-traumatic stress disorder. Given the predicted increase in individuals with mental and neurological manifestations, national responses should be highly scalable and should maximize the use of available resources, both specialist and non-specialist.

For people with long-term mental health conditions or disabilities living in mental health institutions, the health and social impacts have been pronounced. COVID-19 has exposed the shortcomings of such settings as places of care and recovery and has reinforced the need to rethink mental health care in line with the Convention on the Rights of Persons with Disabilities and other international human rights instruments, particularly in relation to moving away from the paradigm of forcibly confining persons with psychosocial disabilities in psychiatric institutions. Deinstitutionalization is a complex and often protracted process that requires strong political commitment, adequate investment, careful planning and a multisectoral approach. The COVID-19 pandemic probably has caused important disruptions to ongoing strategies and programmes aimed at shifting the provision of mental health care from long-term institutions to community-based facilities, but the current crisis may also be leveraged as an opportunity to advocate for a much needed reorientation of mental health services and systems.

There is now strong interest in the potential of digital technologies and tools and/or telemedicine services to deliver better mental health services in this context. It is important to monitor and

evaluate the accessibility, acceptability, safety and impact of these tools and technologies, which are not accessible to the entire population in need, in real-world clinical settings. Other strategies can also contribute substantially to increasing mental health service coverage and closing the mental health implementation gap, ranging from structured assessments of mental health needs at population level (including for vulnerable groups) and settings-based approaches, to integrated and stepped-care models along with training and supervision of health- and social-care workers.

Recommendations

Recommendation 8. Countries should strengthen and develop mental health and psychosocial support services as an integral component of preparedness and response to, and recovery from, COVID-19 and other public health emergencies.
As with any other public health emergency, it is vital that mental health is included as an integral part of COVID-19 response and recovery. This includes the development of resilient public mental health systems to enable the promotion of mental well-being and resilience, as well as preventing and treating mental health conditions. Mental health systems continue to have insufficient capacity to extend their work to respond appropriately to the mental health and psychosocial support needs induced by the pandemic. It is important that people with lived experiences are involved in all aspects of advancing public mental health policies, plans and programmes in the context of COVID-19 recovery, including the design and delivery of primary and secondary health care and referral across service levels, to optimize self- and informal-care opportunities, access to services and navigation of services based on needs.

Recommendation 9. Countries should ensure mental health services are legally, operationally and financially safeguarded, and oversee scaled-up provision of person-centred, community-based services that include innovative modalities of care.
The pandemic has resulted in fluctuating increases in mental health conditions, especially in vulnerable groups, so mental health services need to be strengthened proportionate to the increased needs. People affected by COVID-19, their families, adolescents and young people, frontline workers and other vulnerable groups all need a strong mental health-care system. Such services can best be provided in primary care and secondary community settings; telehealth and digital interventions provide new opportunities to do so efficiently and in a way that promotes innovation in the sector.

New investment is needed to develop person-centred and rights-based services that are delivered through multisectoral teams working in community-based care and support settings. Psychiatric institutional settings are less suited to delivering such services and can expose patients to undue infection risks. Deinstitutionalization is an important element of improving the quality of mental health services in general and the pandemic has increased the need for acceleration in this area.

The TAG notes that the emergency legislation issued in many countries has had a considerable impact on the psychiatric committees that are responsible for determining the limitation of rights of people with mental health conditions through, for instance, forced hospitalizations and guardianship laws. In some cases, the emergency legislation itself has created shortcuts to arrangements that can violate the rights of citizens and, specifically, the rights of those encountering the mental health laws. It therefore is important that policy-makers ensure the rights of people with mental illness are safeguarded, even in the time of the pandemic.

Mental health impacts of COVID-19 on the health- and social-care workforce

Impacts

Over long periods of time during the pandemic, frontline health-care workers have been exposed to multiple stressors, including increased workloads, challenging working conditions, fear and risk of infection, and witnessing the fatal or non-fatal effects of the disease on the patients for whom they care. While they received demonstrations of public appreciation for their commitment, appropriate financial rewards and guarantees of sufficiently attractive working conditions have largely been missing, which may result in ongoing low morale and mental distress that can hinder retention of staff and in turn lead to even more stress among the remaining health-care workers.

Recommendations

Recommendation 10. Countries should ensure safe, fair and supportive working conditions for frontline health and care workers, including the provision of appropriate protective equipment, revised pay and conditions, and access to mental health and psychosocial training and support.

There is a paucity of longitudinal research about the consequences of COVID-19 on the mental health of health-care workers, although several meta-analyses suggest that the mental impact on health-care workers is no larger than in the general population (Arora et al., 2020; Luo et al., 2020; Kunzler et al., 2021a; Wu et al., 2021). Much of the extra work burden caused by COVID-19, including the stress and excess workload, falls to this workforce. It therefore is recommended that legislation and regulations should ensure appropriate work conditions, payment and support for frontline health-care workers.

Interventions to prevent stress and mental health conditions in health-care professionals include:

- providing clear communication, access to adequate personal protection, adequate rest, and practical and psychological support that is associated with reduced psychiatric morbidity in health-care workers in contact with COVID-19 patients (Kisely et al., 2020);
- supporting and preparing health professionals for the demands and psychological impacts before, during and after events such as COVID-19 to minimize risks and enhance resilience (Brooks et al., 2016);
- using cognitive, behavioural and mindfulness interventions, which have been shown to reduce symptoms of anxiety in physicians and medical students and increase resilience (Regehr et al., 2014; Kunzler et al., 2020); and
- using interventions incorporating psychoeducation, interpersonal communication and mindfulness meditation, which have been associated with decreased burnout in physicians (Regehr et al., 2014).

Recommendation 11. Countries should provide mental health workers and frontline responders with capacity-building opportunities and training in preparedness and response to infectious disease and other public health emergencies, basic psychosocial skills and other tools to mitigate the psychological impacts of COVID-19, both for their clients and themselves.

COVID-19 has an important impact on the work of frontline health-care workers and mental health professionals. It is important that front-line workers understand the consequences

COVID-19 can have on the mental health of service users and their families (and themselves) and are able to provide basic support and refer those in need to specialized mental health care. Mental health professionals need to learn and be aware of the impact of COVID-19 on mental health and learn about the specifics of managing people with COVID-19 who have mental health problems.

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Annex 1

TECHNICAL ADVISORY GROUP ON THE MENTAL HEALTH IMPACTS OF COVID-19 IN THE WHO EUROPEAN REGION: MEMBERS AND OBSERVERS, AND WHO SECRETARIAT AND INTERNAL WORKING GROUP

Technical Advisory Group members

Emiliano ALBANESE (Rapporteur), Professor of Public Health, Faculty of Bio-Medicine, Universita' della Svizzera Italiana, Switzerland

Jose Luis AYUSO MATEOS, Professor of Psychiatry, Universidad Autónoma de Madrid; Director of Department of Psychiatry, Hospital Universitario de la Princesa, Spain

Ronny BRUFFAERTS, Head, Centre for Public Health Psychiatry, KU Leuven, Belgium

Emanuele CAROPPO, Psychiatrist, Department of Mental Health – Local Health Unit ASL Roma 2, Rome, Italy

Áine CARROLL, Professor of Healthcare Integration and Improvement, University College Dublin, Ireland

Jana CHIHAI (co-Chair), Associate Professor, State University of Medicine and Pharmacy "N. Testemitanu", Republic of Moldova

Pim CUIJPERS (co-Chair), Head, Department of Clinical, Neuro and Developmental Psychology, Vrije Universiteit Amsterdam, the Netherlands

Liron DAVID, Policy and International Relations Chief Officer, Enosh – the Israeli Mental Health Association, Israel

Daisy FANCOURT, Associate Professor of Psychobiology and Epidemiology, Department of Behavioural Science and Health, University College London, United Kingdom

Kristijan GRĐAN, Chair, Human Rights Committee of Mental Health Europe, Croatia

Anton GRECH, Clinical Chairman, Department of Psychiatry, Department of Health, Malta

Curt HAGQUIST, Guest Professor of Public Health, University of Gothenburg, Sweden

Klaus LIEB, Director, Leibniz Institute for Resilience Research; Director, Department of Psychiatry and Psychotherapy, University Medical Centre Mainz, Germany

Jutta LINDERT, Vice-President, European Public Health Association, Public Mental Health Section; Professor of Public Health, University of Emden-Leer, Germany

Marina MELKUMOVA, Coordinator of Adolescent Health Programmes, Institute of Child and Adolescent Health "Arabkir" Medical Centre, Armenia

Roberto MEZZINA, former Head, WHO Collaborating Centre for Research and Training at the Department of Mental Health, Trieste, Italy

Nicholas MORGAN, Director, Euro Youth Mental Health, Anna Freud Centre, United Kingdom

Petr MOROZOV, Professor, Department of Psychiatry, Faculty for Advanced Medical Studies, Russian National Medical Research University, Moscow, Russian Federation

Ashley (Ley) MULLER, Researcher, Norwegian Institute of Public Health, Norway

Isabel NOGUER, Head of Mental Health Training Programmes, National School of Public Health, Spain

Aikaterini NOMIDOU, independent consultant in disabilities, mental health, law and human rights, Greece

Stefan PRIEBE, Research Director, Institute for Population Health Sciences, Queen Mary University of London, United Kingdom

Richard ROELS, Chartered Occupational Psychologist; Long Covid Support Organisation, United Kingdom

Michael SCHAUB, Scientific Director, Swiss Research Institute for Public Health and Addiction, Zurich, Switzerland

Robert VAN VOREN, Chief Executive, Human Rights in Mental Health – FGIP, Lithuania

Anna Vladimirovna VASILEVA, Head, International Affairs Department, V.M. Bekhterev National Medical Research Centre for Psychiatry and Neurology of the Ministry of Health, St. Petersburg, Russian Federation

Emma WADEY, Head, Mental Health Nursing England; Clinical Lead, National Mental Health, Learning Disability & Autism, COVID-19 Response Cell, United Kingdom

Iván WILLIAMS JIMÉNEZ, Policy and Advocacy Manager, Institution of Occupational Safety and Health, Leicester, United Kingdom

Partner agency members (observers)

European Commission
Nicoline Tamsma, Policy Officer/seconded national expert

Inter-Agency Standing Committee (IASC)
Carmen Valle-Trabadelo, co-Chair IASC Mental Health and Psychosocial Support Reference Group, IFRC Reference Centre for Psychosocial Support

International Federation of Red Cross and Red Crescent Societies (IFRC)
Aneta Trgachevska, Health and Ageing Advisor for Europe
Antonia de Barros Mota, mental health and psychosocial support delegate

Organisation for Economic Co-operation and Development (OECD)
Emily Hewlett, Health Policy Analyst

United Nations International Children's Emergency Fund (UNICEF)
Nina Ferenčić, Senior Regional Adviser on Adolescent Health, Development and Participation

WHO Technical Advisory Group on Safe Schooling During the COVID-19 Pandemic
Antony Morgan (Chair)

World Psychiatric Association (WPA)
Afzal Javed, President

WHO Regional Office for Europe Secretariat

Division of Country Health Policies and Systems

Natasha Azzopardi-Muscat (Director)

Jonathan Campion (Consultant)

Dan Chisholm (Technical Officer)

Meredith Fendt-Newlin (Technical Officer)

Anne-Birgitte Gradman (Programme Assistant)

Ledia Lazeri (Regional Advisor)

Melita Murko (Technical Officer)

Elena Shevkun (Technical Officer)

WHO internal working group

Katrine Bach Habersaat (Technical Officer, Behavioural and Cultural Insights Unit, WHO Regional Office for Europe)

Vivian Barnekow (Technical Officer, Health over the Life-Course Unit, WHO Regional Office for Europe)

Christine Brown (Head of Office, WHO European Office for Investment for Health and Development)

Nils Fietje (Technical Officer, Behavioural and Cultural Insights Unit, WHO Regional Office for Europe)

Jarno Habicht (WHO Representative, WHO Country Office for Ukraine)

Fahmy Hanna (Technical Officer, Department of Mental Health and Substance Use, WHO Headquarters Office)

Devora Kestel (Director, Department of Mental Health and Substance Use, WHO Headquarters Office)

Alisa Ladyk-Bryzghalova (Technical Officer, WHO Country Office for Ukraine)

Govin Permanand (Health Policy Analyst, Division of Country Health Policies and Systems)

Martin Weber (Regional Technical Officer, Health over the Life-Course Unit, WHO Regional Office for Europe)

Isabel Yordi-Aguirre (Technical Officer [Gender and Human Rights], WHO European Office for Investment for Health and Development)

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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World Health Organization
Regional Office for Europe

UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.euro.who.int