RESPOND

CONSEQUENCES OF THE COVID-19 PANDEMIC FOR MENTAL HEALTH AND WELLBEING

RESPOND POLICY BRIEF
JUNE 2024

EXECUTIVE SUMMARY

The EU Horizon2020 RESPOND project (PREparedness of health systems to reduce mental health and Psychosocial concerns resulting from the COVID-19 paNDemic) ran from December 2020 to June 2024 and focused on the consequences of the COVID-19 pandemic for mental health and wellbeing.

The main goal of RESPOND was to improve the preparedness of the European mental health care systems for future pandemics and large-scale crises by identifying which groups were most at risk for adverse mental health consequences due to the COVID-19 pandemic in the short, medium, and long term, as well as to understand which factors determined that risk. RESPOND also examined whether mental health was included in the policy responses during the pandemic.

Additionally, RESPOND adapted and evaluated the implementation of two remotely delivered interventions developed by the World Health Organization (WHO): 'Doing What Matters in Times of Stress (DWM)' and 'Problem Management Plus (PM+)', to improve mental health and well-being, across vulnerable groups affected by distress. Furthermore, RESPOND identified effective strategies to enhance health system preparedness for potential future pandemics.

This is the sixth and final Policy Brief of the RESPOND project. It serves as a comprehensive summary of the latest findings from the RESPOND project, specifically addressing the short- and long-term effects of the COVID-19 pandemic on mental health and wellbeing in the general population, in health and care workers, and in other vulnerable groups.

It outlines the insights gained from our analysis of the policy response, aiming to better inform the development of policies that account for mental health policies during pandemics and other public health crises. Finally, it contains the results so far of the studies evaluating the stepped care DWM/ PM+ programme in decreasing psychological distress among health workers and refugees.

RECENT FINDINGS FROM STUDIES ON COVID-19 AND MENTAL HEALTH

- In addition to the known risk group of women, other risk groups for adverse mental health consequences during the pandemic were younger people, and people with a refugee or migrant background. People with pre-existing mental disorders did not present an increased risk, and suicide rates in Sweden did not increase. However, they were at a higher risk for COVID-19 related mortality in Spain.
- Men with mental health difficulties, particularly those with lower educational levels reported lower levels of adherence to the COVID-19 public health measures.
- Regarding decision making about C0VID-19 related restrictions, health and other professionals as well as policy makers are more inclined to avoid suppression policies that have an impact on mental health compared to the general population. The latter group are more focused on avoiding measures that restrict mobility.
- Brief, scalable psychological interventions such as WHO's Doing What Matters in Times of Stress (DWM) and Problem Management Plus (PM+) delivered remotely by non-specialists within a stepped care model are acceptable and effective in decreasing psychological distress among healthcare workers and refugee migrant groups.

EXECUTIVE SUMMARY

KEY RECOMMENDATIONS TO SUPPORT MENTAL HEALTH AND WELLBEING DURING PANDEMICS

- Policies should focus on resilience, social cohesion, and targeted interventions, with tailored strategies for socioeconomic and vulnerable groups, and combined mental health and substance use screening for youth.
- For people with mental illness pre-existing to the COVID-19 pandemic, specific public health strategies and clinical practices are needed to mitigate the excess mortality related to COVID-19 and potential future epidemics. Assessing disparities in the delivery of psychosocial and psychoeducational interventions for patients with mental disorders should be of concern.
- Indicators of mental health, such as suicidal behaviors, levels of depression, anxiety, and other indicators like self-harm and loneliness, need to be routinely collected with regular updates in order to improve decision-making.
- Governments everywhere need to plan their response to a range of potential future public health emergencies, including pandemics. During any new pandemic, governments also need to be flexible in their response, recognising that pandemics can take different shapes and potentially affect different segments of the population in different ways. As part of both pre-planning and actual pandemic responses, they should actively consider impacts on individuals' mental health and well-being.
- To boost the resilience of vulnerable groups (health and care workers, refugees and migrants) during future societal crises, and to improve accessibility of mental health support during a pandemic, psychological interventions should be implemented, and adapted for the context, population and delivery mode (e.g., making use of remote delivery where feasible and acceptable).
- WHO has developed a number of evidence-based scalable psychological interventions (e.g., DWM and PM+) that are free and can be effectively adapted for a pandemic context and remote delivery.
- Scalable interventions such as DMW and PM+ should be largely disseminated and integrated into standard mental health care or as part of public health crisis prevention strategies.

'As part of both pre-planning and actual pandemic responses, governments should actively consider impacts on individuals' mental health and well-being'

EFFECTS OF THE PANDEMIC ON MENTAL HEALTH AND WELLBEING

Resilience

Resilience is the maintenance of mental well-being despite exposure to adversities. Resilience factors are individual characteristics or social conditions that predict a resilient outcome under such circumstances.[1]

Systematic reviews on mental health responses to the COVID-19 pandemic in particular[2] and to societal crises challenges and crises in general[3] found that good and flexible emotion regulation, social support, and socioeconomic status were resilience factors. Resilience studies conducted during the pandemic taking into account individual differences in adversity exposure, have shown that a mindset of approaching stressful situations positively (positive appraisal style) is a key resilience factor that can be changed by the RESPOND WHO intervention.[4]

Vulnerable groups for COVID-19-related mental health problems

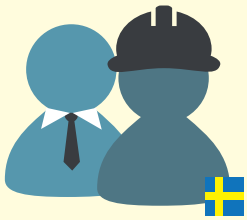
Across multiple studies and meta-analyses focused on the mental health consequences of the pandemic, a small but significant increase in self-reported mental health problems since the pandemic started have been reported.[5]

Some population groups have shown to be more vulnerable to the adverse mental health consequences of the pandemic than others.

LONG-TERM IMPACTS (HEALTH REGISTERS)

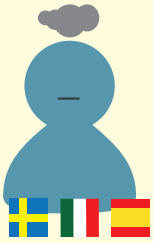
SWEDEN: MIGRANTS/REFUGEES/ASYLUM SEEKERS

- Increased mental healthcare utilization
- No change in antidepressant prescription



SWEDEN: OCCUPATIONAL GROUPS

More sickness absence and antidepressant prescription among people working in culture, trade, transport, manufacturing and retail.



PEOPLE WITH PRE-PANDEMIC MENTAL DISORDERS

Sweden:
- Decreased suicide rates
- Suicide attempts stable

Italy (Lombardy region):
- Suicide attempts stable
- Significant reduction in the delivery of recommended mental healthcare
- Increased risk of experiencing long-term mental health consequences in people who survived acute Covid-19 infection

Spain (Catalonia region):
- Higher COVID-19 related mortality

[01] Kalisch et al. (2017). Nature Human Behaviour, 1, 784-790. https://doi.org/10.1038/s41562-017-0200-8
[02] Schäfer et al. (2022). Trends Cognitive Science, 26, 1171-1189. https://doi.org/10.1016/j.tics.2022.09.017
[03] Schäfer et al. (2023). [Preprint] OSF. https://doi.org/10.31219/osf.io/vwq9c
[04] Petri-Romão et al. (2024). [Preprint] OSF. https://doi.org/10.31219/osf.io/dgx4k
[05] Penninx et al. (2022). Nature Medicine, 28(10), 2027-2037. https://doi.org/10.1038/s41591-022-02028-2

Healthcare personnel and other occupational groups

The pandemic and its restrictions had a great impact on daily life, including the ability to continue working. The impact was found to vary between occupational groups. Although healthcare workers have been particularly affected by COVID-19 pandemic, studies on the mental health effects of COVID-19 are inconclusive. Studies that collected data during the pandemic found relatively high levels of distress among health workers.[6] In Sweden, health register data comparing long-term sickness absence during and prior to the pandemic found that this was higher during the pandemic for people working in entertainment, arts and culture, trade, transportation, as well as manufacturing and retail. Moreover, during the pandemic antidepressant prescriptions increased among people working in culture, trade, transportation, and construction in Sweden.

People with pre-existing mental disorders

People with mental disorders before the pandemic were considered particularly vulnerable to the negative consequences of the pandemic, both in terms of increased suicide risk, as well as an increased risk for COVID-19 infection and mortality.

Unexpectedly, RESPOND's analysis of health registry data from Sweden showed a decrease in suicide rates among individuals with pre-existing severe mental disorders during compared to before the pandemic. Suicide attempts among people with severe mental disorders and in the general population were stable in both Sweden and Lombardy, a region in Italy highly affected by COVID-19 in the first months of the pandemic, where severe public health restrictions had been imposed. The reductions in suicide risk were most pronounced for individuals with substance use disorder, autism, and attention-deficit disorder (ADHD) in Sweden, and depression or bipolar disorder, stress-related and neurotic disorders, and personality disorders in Sweden and Lombardy.

Analysis of health register data in Catalonia, Spain, indicated that compared to the general population, people with pre-existing mental disorders, had an increased risk for COVID-19 related. Thus, they should be considered a similar high-risk group to people with underlying physical conditions. Another important concern is that the lockdown restrictions may have limited access of people with mental health problems to mental health care during the pandemic. Health register data from Italy indeed show that during periods of severe restrictions in Lombardy in 2020, access to psychosocial and psychoeducational care was significantly reduced for people with schizophrenia and depression, compared with access before the pandemic.

Young people and students

Younger people, including students, were at a higher risk for increases in mental health symptoms during the pandemic than older people.[7;8] A review of resilience trajectories during global crises by RESPOND partners confirmed that negative mental health consequences were more evident for younger than for older adults.[9] In France, young people (students and non-students) reported stable or even reduced alcohol intake and binge-drinking during the first COVID-19 lockdown.[10]

However, risk groups for increased alcohol intake were being an older student, and people having suicide plans, whereas being a student in the health field was a protective factor. Among non-students, having a medical diagnosis of a mental disorder was linked to increased alcohol intake.

[06] Mediavilla et al. (2022). Int J Public Health, 67, 1604553. https://doi.org/10.3389/ijph.2022.1604553
[07] Witteveen et al. (2023). PLoS Med, 20(4), e1004206. https://doi.org/10.1371/journal.pmed.1004206
[08] Sun et al. (2023). BMJ, 380, e074224. https://doi.org/10.1136/bmj-2022-074224
[09] Schäfer et al. (2022). Trends Cogn Sci, 26(12), 1171-1189. https://doi.org/10.1016/j.tics.2022.09.017
[10] Kinouani et al. (2024). BMC Public Health, 24(1), 646. https://doi.org/10.1186/s12889-024-18182-w

People with a refugee and migrant background

From the start of the pandemic, socioeconomically disadvantaged groups, including migrants and refugees were identified as being vulnerable to pandemic-related mental health problems.[11] Swedish health register data showed that mental health care utilisation for common mental disorders increased among refugees during the COVID-19 pandemic, particularly among those in marginalised labour market positions and with lower levels of education. However, there were no significant changes in antidepressant prescriptions.

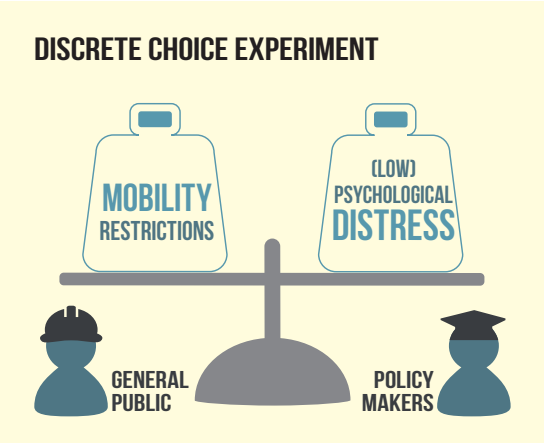
Relation between mental health symptoms and adherence to public health measures

An analysis of the CO-RESPOND (N=13,635[12]), a database consisting of individual data of cohort studies on mental health symptoms during the pandemic, demonstrated that during the pandemic, women with mental health difficulties reported to adhere more strictly to public health measures, whereas men with similar challenges displayed reduced compliance, particularly among those with lower education levels.

Policy responses to the pandemic

RESPOND partners from the London School of Economics and Political Science and UC Louvain (Belgium) looked at the decision-making processes during the pandemic by examining policy documents, scientific advisory recommendations, behavioural psychology informed public health communication strategies, variations in the timing and stringency of suppression and mitigation measures, print, social media, radio, and broadcast media content analysis, as well as interviews with a range of stakeholders.

A discrete choice experiment and survey was conducted with the general public (1.600 people) and European stakeholders (140 stakeholders) to uncover the core values guiding decisions around policies to tackle the pandemic, comparing the perspective of decision-makers with those of the general population. In particular this analysis asked respondents to consider the value of mental compared to physical health for both stakeholders and the general population. The preferences of both the population and stakeholders regarding four well-being attributes was examined: physical health, mental health, employment, and liberty in the context of a pandemic. Most respondents in the experiment engaged in trade-offs between psychological distress, hospitalization risk, and other non-health attributes. Respondents were willing to accept an increase of 0.6% in psychological distress to reduce hospitalization by 1 per 100.000. Interestingly, stakeholders prioritized low psychological distress more than the general population, while the general population tended to prioritize mobility restrictions. Respondents with more negative attitudes towards people with mental health issues or people hospitalized due to COVID-19 were less likely to prioritize low psychological distress over hospitalization risk. Overall, stakeholders were more critical of suppression policies concerning mental health compared to the general population.



[11] Aragona et al. (2022). International Journal of Social Psychiatry, 68(1), 203-209. https://doi.org/10.1177/0020764020988572

[12] CO-RESPOND is a harmonised database created during the RESPOND project, incorporating data from COMET, COVID AND I, DYNACORE-L, EDAD CON SALUD, HEROES, HEROES NL, LORA, MARP, MINDCOVID, and TEMPO

Recommendations for future policy responses to public health crises

As part of RESPOND we have examined processes and structures for making policy decisions during times of crisis, identifying effective and less effective aspects of policy making processes during the COVID-19 pandemic, with a particular focus on their impact on mental health. Table 1 summarises some of the key learnings from the pandemic, adapting an existing framework looking at the process of policy making.[13]

FACTORS SHAPING EFFECTIVE DECISION MAKING DURING A PUBLIC HEALTH CRISIS		
OVERARCHING THEME	**FACTOR**	**APPROACH KEY FACILITATING ACTIONS**
ACTOR POWER 	Pathways for effective policy making + scientific community communication	Establish scientific advisory groups that include mental health expertise to provide input to policy making.
	Civil society involvement	Ensure civil society organisation involvement includes groups focused on population mental as well as people with lived experience of poor mental health.
COMMUNICATION STRATEGIES, TIMING AND FOCUS 	Communicating experience on mental health impacts, early and continually to policy makers	Present information early on potential mental health impacts drawing on experience from previous pandemics and other crises. Update as new evidence emerges.
	Public facing communication on mental health	Effective communication on mental health can help raise profile, increasing likelihood issue addressed, as well as reducing stigma and fear of seeking help.
UNDERSTANDING POLITICAL CONTEXT 	Facilitating cooperation	Within countries, especially where decision making is very decentralised, co-ordination of mental health response helpful. Opportunities, led by designated 'co-ordinator' for collaboration, knowledge exchange and future planning.
MENTAL HEALTH IMPACT ASSESSMENT AND COMMUNICATION TO POLICY MAKERS 	Measuring what matters: make use of multiple credible indicators	Collect data on multiple indicators for mental health impacts, including conventional indicators of mental ill-health, but also resilience, wellbeing, and other risk determinants (e.g., loneliness[14], social determinants). Will help in providing a more flexible, fine-tuned strategy that can inform about mitigation strategies for specific vulnerable groups.
	Effective interventions	Rapid review / modelling of (cost-effectiveness) of possible pandemic response strategies. Conduct mental health impact assessments on potential positive/ negative impacts.
	Evaluate response	Independently evaluate response to pandemic/ public health crisis, including mental health impact. Helps ensure objective institutional memory, as maybe many years between crises.

Table 1: Facilitating more effective decision making for mental health during the pandemic

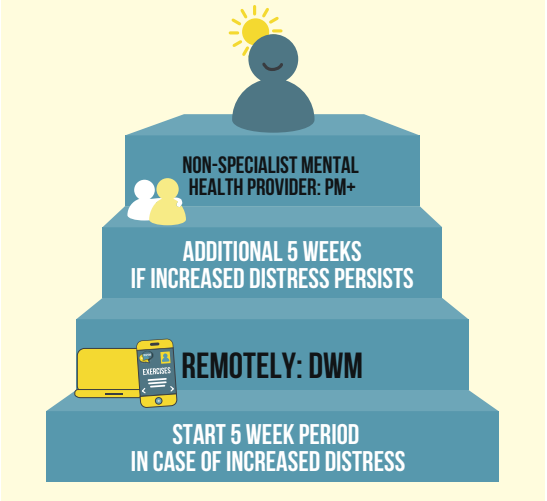
[13] Shiffman, J., & Smith, S. (2007). The Lancet, 370(9595), 1370-1379. https://doi.org/10.1016/S0140-6736(07)61579-7

[14] Duveau et al. Manuscript in preparation 2024.

RESPONDING TO THE MENTAL HEALTH NEEDS DURING THE PANDEMICS: SCALABLE PROGRAMMES TO IMPROVE MENTAL HEALTH AND WELL-BEING

Remotely delivered stepped-care programme to address psychological distress

RESPOND partners implemented a two-step intervention to address psychological distress among vulnerable groups affected by COVID-19 based on WHO-developed strategies adapted for remote delivery, and health and care workers and refugee and migrant populations: Doing What Matters in Times of Stress (DWM) and Problem Management Plus (PM+).



Initially, participants received DWM, a guided self-help stress management intervention provided via an online platform accessible on a mobile phone. When participants continued to report increased psychological distress, they were invited to PM+ which was delivered over five weekly face-to-face remotely delivered video conferencing sessions. PM+ addresses common mental health problems (e.g. depression, anxiety, stress) and self-identified practical problems (e.g. unemployment) for adults affected by crisis. Each intervention lasted five weeks and was delivered by non-specialist providers.

In **Spain**, these were mental health providers (psychiatry, clinical psychology, and mental health nursing trainees) whereas in **Italy** the helpers were peer helpers with at least primary school level literacy, as well as good knowledge and skills in providing psychosocial support. Since helpers were from the same cultural background as the participants, the DWM/PM+ programmes could be delivered in the participants' own language, without the use of interpreters.

Implementation of the RESPOND stepped care programme for health and care workers

Results from a randomised clinical trial in Spain among 232 healthcare workers working for the Departments of Health in the Community of Madrid and Catalonia, showed a significant reduction in anxiety and depression symptoms among participants after receiving DWM compared to those receiving enhanced care as usual.

Shortly after receiving DWM as a first step, a significant decrease in symptoms of anxiety and depression was found compared to care as usual. However, three-quarter of the participants still experienced some levels of distress symptoms, and they were offered PM+ as a next step. Following PM+, significant reductions in symptoms of anxiety, depression, and posttraumatic stress disorder were found. Overall, effect sizes ranged from small to large and were stronger after both DWM/PM+ than after DWM only.

This demonstrates the effectiveness of brief stepped-care psychological interventions in mitigating psychological distress during periods of crisis among HCWs. In addition to anxiety, depression, and posttraumatic stress symptoms, the intervention effectively improved resilience outcomes at all time points. This improvement was mediated by changes in the tendency to appraise stressors mildly optimistically, in line with the assumption that positive appraisal is key to resilience.[15] Economic analysis also indicates that the intervention is highly likely to be cost-effective in a Spanish context.

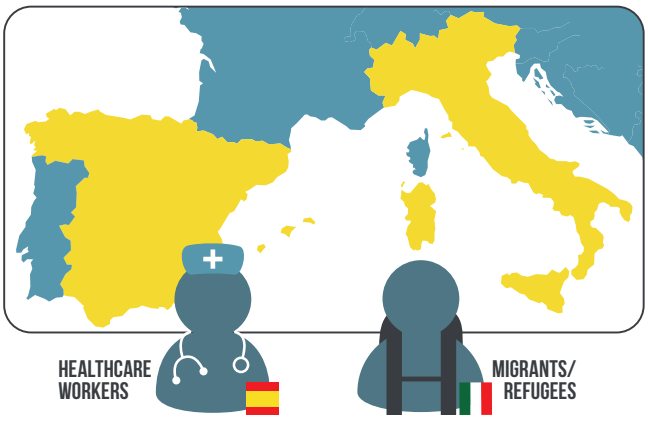
In Belgium, a qualitative study among 59 health workers working in 10 nursing Homes for older people showed that participants in the intervention reported positive implementation outcomes in terms of appropriateness of the intervention, realising the extent to which they had been affected by psychological distress, and expressing intentions to seek further support. However, the low number of recruited participants points to a lack of trust and knowledge of the intervention's principles, and several organisational barriers that were identified, highlighted the need for strategies to improve program accessibility, acceptability, and feasibility for healthcare workers in crisis contexts.

Implementation of the RESPOND stepped care programme for migrants and refugees

RESPOND conducted three randomised clinical trials focused on assessing the effectiveness of the stepped-care intervention with different vulnerable populations, namely migrants and asylum seekers in Italy from Verona and Rome, individuals experiencing unstable housing in France most of whom were migrant/refugee, and Polish labour migrants in the Netherlands.

ITALY

In Italy, 217 people with a refugee or migrant background from Verona and Rome were included in the trial examining the stepped-care DWM/PM+ program. The stepped-care program effectively reduced anxiety and depression symptoms in participants compared to those in the control group. The intervention showed consistent positive effects across different time points, with substantial reductions in symptoms of anxiety and depression, post-traumatic stress symptoms and self-identified problems following DWM/PM+. Furthermore, exploratory analyses suggested that the intervention was particularly effective for participants with higher baseline levels of anxiety and depression.



FRANCE

Results in France among 141 people experiencing unstable housing in France indicated a possible decrease in the levels of symptoms of psychological distress, as a result of the DWM/PM+ intervention. Notably, most participants accessing DWM and PM+ had high levels of psychological distress and notable difficulties accessing the healthcare system. Initial indications are that PM+ delivered in person was preferable for these vulnerable populations given their unstable housing conditions and high levels of social isolation. Lack of access to phones or computers also made it difficult for some participants to have sustained access to the online DWM intervention.

THE NETHERLANDS

Although the collection of follow-up data in the Netherlands among 218 included Polish labour migrants is still ongoing and will be concluded at the end of June 2024, early indicators of participant engagement in the intervention are promising. Over half of the participants in the intervention group completed all five modules of the DWM web app, with 77% completing at least three modules. Furthermore, 89% of participants were eligible for PM+, of which 82% initiated and 94% of those completed the sessions, demonstrating a high level of commitment to the intervention. These engagement metrics suggest a potential for positive mental health outcomes, which will be examined in the upcoming analysis post-data collection.

[15] Petri-Romão et al. (2024). [Preprint] OSF. https://doi.org/10.31219/osf.io/dgx4k

ABOUT RESPOND

RESPOND stands for *PREparedness of health Systems to reduce mental health and Psychosocial concerns resulting from the COVID-19 paNDemic*. The project brings together a network of specialists in the areas of epidemiology, psychology, psychiatry, sociology, health systems research, political science, economic science, implementation science, policymaking, and dissemination and is coordinated by Prof. Marit Sijbrandij of the Department of Clinical, Neuro- and Developmental Psychology at the Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam.

RESPOND is a European Union Horizon 2020 funded project running from December 2020 to May 2024.

To contact the central project office, please write to:
respond.fgb@vu.nl.

This project has received funding from the European Union's Horizon 2020 research and innovation programme Societal Challenges under Grant Agreement No 101016127.