Dealing with the COVID-19 pandemic in Europe: five lessons from the European Society for Traumatic Stress Studies

Jana D. Javakhishvili, Filip Amberg, Neil Greenberg, Evaldas Kazlauskas, Annett Lotzin and Miguel Xavier

ABSTRACT

The paper provides insights into the mental health consequences of the coronavirus disease 2019 (COVID-19) pandemic from the Central, Eastern, Nordic, Southern, and Western subregions of Europe, represented by five member countries of the European Society for Traumatic Stress Studies (ESTSS). On the basis of the existing national research and experiences in these countries, we propose five lessons learned. (1) There is no evidence of a mental health pandemic so far, yet the countries in focus experienced an increase in severe mental disorders but some increase in the symptoms of common mental health disorders are observable. More high-quality longitudinal studies are needed to understand the mental health burden of the pandemic. (2) The pandemic affects countries (including the mental health situation) differently, depending on the level of the exposure, management policies, pre-pandemic structural characteristics, and healthcare resources. (3) The pandemic affects people differently: the exposure severity to pandemic-related stressors differs between individuals, as well as individual resources to cope with these stressors. There are winners and losers as well as identifiable at-risk groups that need particular attention. (4) Besides the negative consequences, the pandemic has had a positive impact. The rapidly applied innovations within the system of healthcare responses provide a window of opportunity for positive changes in mental healthcare policies, strategies, and practices. The increased focus on mental health during the pandemic may contribute to the prioritization of mental health issues at policy-making and organizational levels and may reduce stigma. (5) A stress- and trauma-informed response to COVID-19 is required. The European community of psychotraumatologists under the leadership of ESTSS plays an important role in promoting stress- and trauma-informed healthcare and policies of pandemic management. Based on the lessons learned, we propose a stepped-care public mental health model for the prevention of adverse mental health outcomes during pandemics.

CONTACT
Jana D. Javakhishvili, darejan.javakhishvili@iliasunu.edu.ge, Institute of Addiction Studies, School of Arts and Science, Ilia State University, Tbilisi, Georgia

ARTICLE HISTORY
Received 1 October 2021
Revised 24 January 2022
Accepted 21 February 2022

KEYWORDS
COVID-19; Europe; ESTSS; public mental health; pandemic; stress-informed; trauma-informed

PALABRAS CLAVE
COVID-19; Europa; ESTSS; salud mental publica; pandemia; informada en estrés; informada en trauma

HIGHLIGHTS
- Population mental health is affected differently in the COVID-19 pandemic: there are winners and losers, as well as identifiable at-risk groups that need particular attention.
- A stress- and trauma-informed public mental health stepped-care model can address pandemic-related mental health burden in a systematic way.

Accepted 21 February 2022

https://doi.org/10.1080/20008198.2022.2046330

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.
1. Introduction

In the early stages of the coronavirus disease 2019 (COVID-19) crisis, a number of mental health experts warned of a risk of ‘mental and behavioural illnesses pandemic’ (Galea, Merchant, & Lurie, 2020) or a ‘second disaster’ (Gersons, Smit, Smit, Kazlaukas, & McFarlane, 2020) and a need for prevention and early intervention to mitigate it. More than 2 years have passed since the beginning of the COVID-19 crisis and a large number of studies have explored the corresponding mental health burden in Europe and worldwide. According to the experts’ estimation, at least 100 mental health and COVID-19-focused scientific papers are published every single day (Wessely, 2021). This paper aims to reflect on the national data and findings of the relevant studies from five European Society for Traumatic Stress Studies (ESTSS) member countries: Georgia, Germany, Portugal, Sweden, and the UK. The countries were chosen based on the following criteria: (1) ESTSS member countries; (2) from five different subregions of Europe; (3) with different levels of income (low income, middle income, and high income); (4) maturity of democracy (strong democracy vs young democracy); (5) mental healthcare infrastructure development (developed vs underdeveloped); and (6) diverse pandemic management strategies (in terms of stringency index, scale of economic support measures, scale of health support measures and related communication, centralized vs decentralized management, and consistency of the corresponding policies). Information on all five criteria for each country in focus can be found in Supplementary Table S1.

This paper provides an expert opinion on how to deal with the pandemic-related mental health crises from a stress- and trauma-informed public mental health perspective. It is not an overview of the COVID-related mental health situation. The countries in focus are presented as case studies; therefore, lessons discussed are based on examining these cases, rather than comparative analysis.

In Section 2, we describe the COVID-19-related mental health burden in the five countries, based on the nationally collected data and findings of the research available so far. In Section 3, we conclude lessons learned so far. In Section 4, we propose an evidence-based stress- and trauma-informed model for addressing pandemic-related mental health challenges. In Section 5, we draw conclusions based on the knowledge and experiences summarized in the previous sections.
2.1. Georgia

The state response to the pandemic in Georgia, based on a highly centralized governance and legally binding coercive regulations, with a disproportionately high stringency index (Hale et al., 2021) at the beginning of the pandemic, resulted in human rights violations, followed by inconsistent governance strategies. As of September 2021, among the five countries in focus, Georgia has highest number of confirmed COVID-19 cases as well as COVID-19 deaths.

Studies assessing the impact of the pandemic on the mental health of the Georgian population reveal a high level of mental distress. In an online cross-sectional study, in the convenience sample of 2088 respondents from the general population, high levels of symptoms for mental disorders were observed for anxiety (22.5%), depression (27.3%), post-traumatic stress disorder (PTSD) (12.1%), and adjustment disorder (36.0%) (Makhashvili et al., 2020). According to the findings of the ESTSS pan-European ADJUST study, out of the 11 countries participating in the study, Georgia and another Eastern European country (Lithuania) are experiencing the highest level of adjustment disorder symptoms (Lotzin, Krause, et al., 2021). However, no baseline pre-pandemic data are available for either of these countries to allow an insight into the extent to which the revealed picture can be attributed to the pandemic.

The community-based mental health services for patients with severe mental disorders, which have continued working in face-to-face mode during the pandemic, do not report an increased number of referrals. Services for common mental health problems moved to the online mode of service provision immediately, and, from the beginning of the pandemic, reported increased self-referral of clients. There is an increased demand for professional burnout prevention interventions from financially stable organizations (banks, insurance companies, etc.). A rise in demand for counselling is also observable in 2020 and 2021 in the student counselling services (Makhashvili & Javakhishvili, 2021). According to expert opinion, these may contribute to a reduction in mental health-related stigma in Georgia. The Georgian Society of Psychotrauma and a number of mental healthcare non-governmental organizations, with the support of international donors, organized crisis intervention services, setting up a hotline and online crisis counselling service to fill the existing service gaps in the country.

2.2. Germany

Experts characterized the pandemic management strategy in Germany as an initial bottom–up approach replaced by federal unity, which again returned to a decentralized approach, with regional variations and local discretions (Kühlmann, Hellström, Ramberg, & Reiter, 2021). A high number of tests and a high-quality healthcare system with intensive care beds with respiratory support, as well as successful vaccination, contributed to low fatality rates in the country. As of September 2021, both confirmed COVID-19 cases and COVID-19 deaths in Germany are the lowest among the five countries.

High levels of symptoms of depression, anxiety, and PTSD were reported during the first wave of the pandemic in the German population (Bäuerle et al., 2020a; Bendau et al., 2021; Peters, Rospleszcz, Greiser, Dallavalle, & Berger, 2020; Petzold et al., 2020). In an online survey, 65.2% reported psychological distress and 59% reported COVID-19-related fear (Bäuerle et al., 2020a). Women and younger individuals reported higher levels of distress (Bäuerle et al., 2020b). Most of the conducted studies used convenience samples that overrepresented highly educated female individuals with access to the internet, which complicates the generalization of the findings to the general German population. One population-based cohort study during the early phase of the pandemic found that symptoms of depression and anxiety increased, compared to the year before the pandemic, but only in participants under 60 years of age (Peters et al., 2020). In addition to female gender and younger age, a pre-existing mental disorder was found to be a risk factor for higher levels of distress, anxiety, and depressive symptoms (Bäuerle et al., 2020b; Bendau et al., 2021). It can be expected that a history of childhood abuse or neglect is another risk factor for an increased level of distress. Survivors of childhood abuse reported that preventive measures such as wearing protection over the mouth and nose reactivated trauma-related feelings such as powerless, helplessness, and limited self-determination; at the same time, some individuals with a history of childhood abuse felt safer than before the pandemic by keeping a distance and reducing physical contact (UKASK, 2020). In an ongoing international cohort study on symptoms of adjustment disorder (Lotzin, Krause, et al., 2021), restricted physical and social contacts, restricted leisure activities, work-related problems, and difficult housing conditions were associated with symptoms of adjustment disorders.

The need for psychosocial and mental health support increased during the early phase of the pandemic. The use of existing or newly established telephone or online helplines increased by 20–25% (Nummer gegen Kummer, 2021). While help-seeking for mental health problems increased, the availability of psychosocial support was restricted. House visits were suspended, and psychosocial and mental health services were closed or moved to telephone- or web-based services. Some providers adapted existing interventions...
to promote online psychosocial support during the pandemic (Lotzin, Hinrichsen, et al., 2021; Kenne- mich et al., 2021). The German-speaking traumatic stress society launched recommendations and research for affected professionals and members of the public.

2.3. Portugal

Portugal exercised a centralized, top-to-bottom approach in the pandemic management, organized by the government at national and regional levels. A number of financial and non-financial measures were initiated to support the population and at-risk groups. Among these measures, a temporary regular status was granted to all migrants who has previously started their regularization procedure, which facilitated access to social services, including healthcare, for this vulnerable group. Containment measures triggered some human rights concerns; for example, presidential elections took place during the pandemic and due to COVID-19 not all the people in isolation were able to realize their right to vote (Violante & Lanceiro, 2021).

In an online study conducted during the first wave of the pandemic, out of the 6079 adult respondents (above 18 years of age), 33.7% showed signs of psychological distress; higher levels of distress were revealed among women and young adults in the age range 18–29 years. In the same sample, out of the 2097 healthcare professionals, 44.8% showed signs of psychological distress; those who were directly treating patients with COVID-19 were more affected than other professionals, with a 2.5 times higher risk of psychological distress. Again in the same sample, out of people infected with severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) who were in isolation or had already recovered, 72% reported symptoms of psychological distress, with 56% showing symptoms of moderate to severe depression and 56% moderate to severe anxiety (Instituto Nacional de Saúde Doutor Ricardo Jorge, 2020).

Since the beginning of the pandemic, several public mental health measures have been taken, according to the four-level model proposed by the World Health Organization (WHO): (1) self-care: increasing the population’s literacy on COVID-19-related mental health risks and coping strategies; (2) community care: establishing several hotlines for both general health risks and coping strategies; (2) community care: establishing local mental health centres; (3) primary care: establishing local mental health centres for disasters within existing health centres, in close connection with psychiatric services from the same catchment areas; and (4) specialized care: urging psychiatric services to maintain close contact with patients with severe mental disorders, and to support frontline staff in general hospitals. To promote resilience, the Portuguese Society for Traumatic Stress Studies has been implementing the following trauma prevention and crisis intervention strategies: (1) psychoeducation of different stakeholders; (2) training of frontline staff; (3) networking with organizations/institutions in contact with populations with greater traumatic vulnerability; and (4) conducting research exploring the mental health burden of the pandemic.

2.4. Sweden

The most liberal and decentralized policies of the pandemic management, out of the five countries, are observable in Sweden: ‘normal governance’ was not interrupted, and strategies are largely based on voluntary compliance with the governmental recommendations without legally binding coercive regulations (Kuhlmann et al., 2021).

A longitudinal study of well-being among elderly people during 2015 to March–April 2020 found a slight increase in well-being in the acute phase of the pandemic compared to previous years, although elderly people with higher levels of COVID-19-related anxiety showed a decrease in well-being (Kivi, Hansson, & Bjälkebring, 2021). In contrast, a cross-sectional study of elderly people found that up to half reported worse mental health (e.g. feeling depressed, having sleeping problems), although this study underscored a heterogeneous response as well (Gustavsson & Beckman, 2020). A cross-sectional survey among the general population implemented from May to June 2020 found that one-third of the 1200 respondents had significant levels of depression, one-quarter experienced anxiety, and 38% experienced problems with insomnia, and the findings further indicated that the risks were greater among those with previous mental health difficulties (McCracken, Badinlou, Buhrman, & Brocki, 2020). A study of 5600 individuals during the first and second waves suggested that negative changes in lifestyle habits and spending more time in a mentally passive state and sitting at home were associated with higher odds of mental ill-health (Blom et al., 2021). A related longitudinal study found that 2000 inhabitants in a metropolitan area spent more out in nature during the pandemic than before, and that greater exposure to nature was related to fewer symptoms of depression, anxiety, and perceived and cognitive stress (Lõhmus, Stenfors, Lind, Lauber, & Georgelis, 2021).

A preprint on population register data in Sweden suggests that no increase in suicide rates has yet been found and that there is no evidence for increased risk of suicide, as linked with historic influenza pandemics (Rück et al., 2020). However, scholars have warned about the usual pattern of suppressed suicide rates during a crisis followed by a surge later on (Wasser- man, Iosue, Wuestefeld, & Carli, 2020).
Providers of telephone services to people experiencing a crisis, both those catering to children and to the elderly, have reported a higher number of callers. The largest service for anonymous telephone services to children reports that they received 16% more calls during 2020 than 2019: the calls related to anxiety increased by 61% from the past year and the agency suggested that social restrictions increased children’s exposure to domestic violence (Bris, 2021).

The Swedish Public Health Agency suggested that the pandemic load on mental health nationally is equivocal and that it is more meaningful to examine the effects on subgroups, such as COVID-19 cases, bereaved individuals, or unemployed people (Swedish Public Health Agency, 2021). Initially, there were reports of a drop in attendance at psychiatric outpatient services, and some feared that people in need of mental health services were not seeking much-needed care. Services switched to remote sessions as far as possible, via video and telephone appointments. Sweden has a strong research milieu on internet-delivered psychological treatment, which may have facilitated operations in this setting. Experts in the field of psychotraumatology have provided advice and established online training for various groups, including efforts to highlight the issue of moral stress among healthcare personnel.

2.5. UK

Some experts refer to the UK COVID-19 crisis management style as a ‘random style of administration’, meaning that the implemented policies were lacking ideology and a clear framework, except for the vaccination programme, which is considered a massive success (Farrar & Ahuja, 2021). Analysis of the statistical data from the first months/year of the pandemic revealed that chances of surviving COVID-19 were much lower for those living in the most deprived areas, for older and disabled people who died in residential homes, and for those with pre-existing health conditions (Flynn et al., 2020). To address these inequalities, the need for a fundamental reform of public policies and corresponding services has been discussed (Thomas & Clyne, 2021).

Among the general population, the average level of mental distress (measured using the General Health Questionnaire-12) was 8.1% higher in April 2020 than it was for the same period between 2017 and 2019. The proportion of adults who reported a clinically significant level of psychological distress increased from 20.7% in 2019 to 29.5% in April 2020, before falling to 21.4% in July 2020 and 21.5% in September 2020. The greatest increases were seen among young people, women, and those with pre-school-aged children (Pierce et al., 2020).

Studies of healthcare workers between April and July 2020 found that around one-third reported substantial PTSD symptoms and up to 45% of intensive care unit workers reported possible PTSD, depression, anxiety disorders, or alcohol misuse (Greenberg et al., 2021). However, the experts argue that these results need to be considered in the light of a number of characteristics of the studies, such as low response rates, convenience sampling, online survey-related response bias, and the fact that the questionnaires used in these surveys are not diagnostic tools, thus limiting the generalizability of the findings (Lamb, Greenberg, Stevelink, & Wessely, 2020). In a study implemented among the UK frontline healthcare workers during the first wave of the pandemic, around 57% of the online survey participants met criteria for clinically significant distress for PTSD (22%), anxiety (47%), and depression (47%) (Greene et al., 2021). Moral injury was reported by frontline healthcare staff as one of the major challenges of the pandemic (Greenberg et al., 2021; Lamb et al., 2021; Williamson, Murphy, & Greenberg, 2020).

To respond to the mental health challenges of the COVID-19 pandemic, reliance on the public mental health approach increased in the UK. The focus is on relatively low-impact, but high-reach, interventions; for example, the whole range of mental health interventions developed by Public Health England – ‘Every Mind Matters’ – which consists of apps and information which help people to help themselves. Special attention is paid to designing, implementing, and collecting evidence on the interventions for organizational settings, and especially for people who work in challenging situations, such as frontline personnel. The UK Psychological Trauma Society is heavily engaged in planning and implementing studies exploring the mental health consequences of COVID-19, as well as in providing preventive interventions aiming to reduce the risk of professional burnout and moral injury, and measuring their efficacy.

3. Lessons learned and recommendations

3.1. Lesson 1: There is no evidence of a mental health pandemic so far

The studies examining the mental health impact of the pandemic indicate an increase in distress, depression, and anxiety among the general populations of the countries, as well as among particular at-risk groups. In contrast, there is no evidence of an increase in the prevalence of severe mental disorders. While we have not yet reached the full height of the pandemic, a further increase in common mental health problems, including delayed-onset symptoms, can be expected in at-risk groups with pre-existing vulnerabilities (e.g. previous mental disorders and/or trauma.
exposure) that are exposed to multiple or severe stressors. The findings of the available studies should be considered in the light of the following methodological and context-related limitations:

- The data available so far represent the situation at the beginning, ‘adjustment stage’ of the pandemic.
- Most of the studies are internet-based surveys with the following shortcomings: (1) use of self-reports which cannot prevent response bias; (2) use of questionnaires, which are not diagnostic tools; (3) selection of participants by convenience sampling, which overrepresents highly educated (often female) respondents; and (4) exclusion of participants with no access to the internet, e.g. populations below the poverty line are underrepresented.
- The studies available for analysis are mostly cross-sectional and do not allow the trajectories of mental health symptoms to be observed.
- In a number of studies exploring the impact of the pandemic among at-risk groups (e.g. healthcare personnel), the response rate is extremely low.

The described limitations do not provide a solid ground for robust conclusions on the extent of mental health problems in the general population. Further studies carried out during later phases of the pandemic are needed to understand the course of mental health problems in the general population as well as in at-risk groups, and the factors influencing their dynamic.

3.2. Lesson 2: The pandemic affects countries differently

A number of studies suggest that not all of the countries’ populations are affected at the same extent. For example, Sweden reports that the published research has not been able to find any greater effects of the pandemic on the mental health of the Swedish population overall, while other countries, i.e. Germany and Portugal, found increased levels of symptoms of anxiety, depression, and PTSD, as well as of adjustment disorder, in the early phase of the pandemic. The ESTSS pan-European ADJUST study, which has been implemented in 11 ESTSS member countries, revealed that the level of symptoms of adjustment disorder varied by country, with Georgia and Lithuania showing higher scores for adjustment disorder than the remaining nine countries (Lotzin, Krause, et al., 2021). These results are in line with the findings of another international study that found increased mental health problems in Latin America compared to other countries (Olff et al., 2021).

The scale of exposure (e.g. the number of cases and the death toll in a particular country) and governance policies (stringency, and economic and health support measures) may influence the mental health burden in the countries. The pre-pandemic parameters (e.g. the maturity of democracy, level of income and available resources, general pandemic preparedness, and capacity and efficacy of the healthcare system) may play a role as well, as a pandemic-related crisis may reveal and exacerbate already existing problems. Closure and containment policies implemented during the pandemic may threaten or even violate human rights, particularly in countries with a younger democracy. In such countries, a system of international monitoring could be helpful to prevent falls in democratic developments.

Further research is required to explore the impact of contextual factors on the macro (societal) level. In this regard, the perceived efficacy, fairness, consistency, and transparency of the pandemic governance could be considered as probable mediating factors. The concept of embitterment may be relevant to describe the population responses (Linden & Maercker, 2011).

3.3. Lesson 3: The pandemic affects people differently

Although whole populations face the challenges of the pandemic, the exposure severity is different across groups and individuals. Individuals differ in their exposure to stressors, and in their resources to cope with them. The published research indicates that particular subgroups of the general population have been exposed to potentially traumatic events and suffer from adverse mental health consequences. In particular, health and socioeconomic disparities appear as key factors that contribute to both increased stressor exposure and adverse mental health outcomes. The pandemic not only exposes but also reveals and exacerbates existing vulnerabilities, which are related to differences in the extent and depth of negative mental health consequences. At-risk groups include younger (often female) individuals, individuals who lose their jobs or face financial problems, individuals with a mental disorder or a history of childhood abuse or neglect, and healthcare workers.

To mitigate the adverse mental health consequences of the pandemic, the modifiable risk and protective factors of mental health need to be identified and targeted. In this regard, evidence-based mapping of risk and protective factors is important to inform governance of the pandemic.

3.4. Lesson 4: The pandemic has positive side effects as well

In addition to the devastating negative effects on countries and societies, the pandemic is also likely to have positive side-effects in a number of areas that can contribute towards the improvement of mental healthcare policies and services, as well as towards reducing mental health stigma. For example, in the UK, an
intense discussion on the need for reforms has begun, focusing on the need for preventive public policies to reduce inequalities and putting in place a ‘Health in All Policies’ principle (BMJ, 2020). Moving to the virtual mode of service provision and rapid development of e-health interventions, accompanied by efficacy studies, may contribute towards improving mental health services and increasing service accessibility in the long term; this conclusion is in line with what many mental health experts and service users think in this regard (Moreno et al., 2020). The reported increase in the number of referrals for mental healthcare services, increased demand, and help-seeking behaviour, as well as the normalization of experiencing mental health problems during the pandemic, may contribute towards overcoming the mental health stigma in our societies.

### 3.5. Lesson 5: A stress- and trauma-informed mental health response to COVID-19 is required

Given the pandemic-related multiple stressors and traumatic events and an increased level of distress among the different populations, a stress- and trauma-informed mental health response is crucial.

---

### Table 1. A stress- and trauma-informed stepped-care model for public mental healthcare during the pandemic.

| Governmental measures                                      | Primary objectives of mental health interventions | Mental health interventions at different levels |
|------------------------------------------------------------|---------------------------------------------------|---------------------------------------------|
| Universal prevention:                                       |                                                   |                                             |
| Addressing mental health needs in the general population   |                                                   |                                             |
| Governmental policies promoting protective factors at a general population level via transparent and consistent policies of pandemic management, efficient communication, etc. | Enhancing resilience and positive coping in general population via informing, capacitating | Low-intensity high-reach public health interventions: At societal level: public information campaign promoting self-care and positive coping (e.g. setting up daily routines, focusing on the positive things in a day) At organizational level: promoting a stress- and trauma-informed organizational culture, introducing staff care practices, enabling supervisors to conduct mental health conversations At individual level: information sheets, apps, websites, and online training for self-care and healthy living |
| Selective prevention:                                       |                                                   |                                             |
| Addressing mental health needs of at-risk groups           |                                                   |                                             |
| Governmental policies promoting protective factors for at-risk groups via economic support measures, social support measures, improving access to education, provision of personal protective equipment, etc. | Enhancing resilience and positive coping in at-risk groups via informing, capacitating, counselling | Public mental health low-intensity high-reach interventions: At-risk groups/vulnerable communities level: enhancing group resilience interventions (e.g. information sheets, online training of community activists, youth self-help and peer support) Organizational level: enhancing organizational resilience for personnel working in potentially traumatic conditions; training of personnel for coping with staff mental health problems, peer support programmes including prevention of moral injury, stigma, etc. Individual level: apps, information sheets, web-based self-help, counselling, etc. |
| Indicated prevention and early intervention:                |                                                   |                                             |
| Addressing mental health needs of individuals with mental health symptoms and/or diagnosis | Enhancing resilience and positive coping in individuals with mental health symptoms or diagnosis via informing, capacitating, counselling, psychological therapies | Public mental health low-impact high-reach interventions and advanced interventions (individual and/or family level): • Individual level: web-based and face-to-face skills-based interventions to reduce persistent distress and to promote recovery; evidence-based methods for enhancing emotional regulation; evidence-based transdiagnostic interventions for youth, etc. If more intense mental health intervention is needed, referral to specialized evidence-based psychological treatment (e.g. grief or trauma-focused therapy) • Family level: online or face-to-face couple or family counselling, etc. Online or face-to-face psychotherapy, pharmacological treatment, multidisciplinary case management, etc. Online or face-to-face psychotherapy, pharmacological treatment, community-based outreach interventions, etc. |
| Governmental policies promoting equal access to mental healthcare via developing corresponding infrastructure (mental healthcare services, internet access, etc.) | Providing treatment and appropriate care to individuals in need of mental health treatment |                                             |
| Continuous care                                            | Providing treatment and psychosocial rehabilitation to individuals in need of continuous mental healthcare |                                             |

---
4. A stress- and trauma-informed stepped-care model for public mental healthcare amid the pandemic

Based on the lessons learned so far, and a framework for the prevention of mental disorders (IoM, 2009), we would like to propose a public health stepped-care model addressing COVID-19-related mental health challenges in a systematic and comprehensive way. The model assumes that stress- and trauma-informed governance of the pandemic promotes an optimal context/environment for the implementation of public mental health interventions. It implies a consistent chain of care via putting in place evidence-based universal, selective, and indicated preventive measures, as well as early intervention, treatment, and continuous care, targeting different (societal, community, group, workplace, and individual) levels. Based on the best practices of implementation of the public mental health approach in the UK, our model, together with the mainstream interventions (e.g. psychological therapies), utilizes to a larger extent relatively low-impact but high-reach interventions (Table 1).

5. Conclusions

At this point, about 2 years since the start of the pandemic, we see no evidence of a parallel mental health pandemic, as predicted by a number of mental health experts at the beginning of the COVID-19 crisis. Evidence available at the moment shows an understandable increase in distress and symptoms of common mental health disorders among the general populations, and particularly in at-risk groups. Additional high-quality longitudinal studies are needed to understand the mental health consequences of the pandemic.

Countries are affected by the COVID-19 crisis in different ways, and may differ in regard to basic structural characteristics, administrative models, institutional contexts, and management policies, as well as pre-pandemic circumstances. Multidisciplinary studies are needed to further explore the influence of macro-level factors as well as the perception of these factors on the mental health of populations and at-risk groups.

People are affected differently by the pandemic, there are ‘winners and losers’ as well as identifiable at-risk groups that need particular attention. A public mental health-based stepped-care model addressing mental health during the pandemic provides a framework for addressing COVID-19-related mental health needs in a systematic and consistent way. Stress- and trauma-informed governance policies can create an environment to facilitate the implementation of this model.

Besides the negative consequences, the COVID-19 pandemic creates a window of opportunity for reforms and innovations in the field of mental healthcare, has the potential to increase accessibility of services, and contributes towards the destigmatization of mental health and help-seeking behaviour.

To effectively promote stress- and trauma-informed evidence-based governance in the pandemic, ESTSS needs to regularly translate academic knowledge into policy documents, join forces with other stakeholders (such as professional societies and problem-bearers), and advocate for changes leading to better mental health outcomes for all.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Jana D. Javakhishvili https://orcid.org/0000-0003-0196-7582
Filip Arnberg https://orcid.org/0000-0002-1317-2093
Neil Greenberg https://orcid.org/0000-0003-4550-2971
 Evaldas Kazlauskas https://orcid.org/0000-0002-6654-6220
Annett Lotzin https://orcid.org/0000-0002-2834-8047
Miguel Xavier https://orcid.org/0000-0003-2698-1284

References

Bäuerle, A., Teufel, M., Musche, V., Weismüller, B., Kohler, H., Hektamp, M., … Skoda, E. M. (2020a). Increased generalized anxiety, depression and distress during the COVID-19 pandemic: A cross-sectional study in Germany. Journal of Public Health, 42(4), 672–678. https://doi.org/10.1093/pubmed/fdaa106
Bäuerle, A., Steinbach, J., Schweda, A., Beckord, J., Hektamp, M., Weismüller, B., … Skoda, E. M. (2020b). Mental health burden of the COVID-19 outbreak in Germany: Predictors of mental health impairment. Journal of
Farrar, J., & Ahuja, A. (2021). Longitudinal changes of anxiety and depressive symptoms during the COVID-19 pandemic in Germany: The role of pre-existing anxiety, depressive, and other mental disorders. Journal of Anxiety Disorders, 79, 102377. doi:10.1016/j.janxdis.2021.102377

Blom, V., Lönn, A., Ekblom, B., Kallings, L. V., Väisänen, D., Hemmingsson, E., ... Ekblom-Bak, E. (2021). Lifestyle habits and mental health in light of the two COVID-19 pandemic waves in Sweden, 2020. International Journal of Environmental Research and Public Health, 18(6), 3313. doi:10.3390/ijerph18063313

BMJ. (2020). COVID-19: UK government response was overcentralised and poorly communicated, say peers. BMJ, 371, m4445. doi:10.1136/bmj.m4445. (Published 13 November 2020).

BRIS. (2021). Yearly report 2020. Stockholm: BRIS.

Farrar, J., & Ahuja, A. (2021). The spike: The virus vs. the people – The inside story. London: Profile Books.

Flynn, D., Moloney, E., Bhattachar, N., Scott, J., Breckons, M., Avery, L., & Moy, N. (2020). COVID-19 pandemic in the United Kingdom. Health Policy and Technology, doi:10.1016/j.hjpt.2020.08.003

Hale, T., Angrist, N., Goldszmidt, R., Kira, B., Petherick, A., Phillips, T., ... Tatlow, H. (2021). A global panel database of pandemic policies (Oxford COVID-19 Government response tracker). Nature Human Behaviour, doi:10.1038/s41562-021-01079-89

Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing. The need for prevention and early intervention. JAMA Internal Medicine. https://jamanetwork.com/ on 04/10/2020.

Gersons, B., Smid, G., Smit, A., Kazlauskas, E., & McFarlane, A. (2020). Can a ‘second disaster’ during and after the COVID-19 pandemic be mitigated? European Journal of Psychotraumatology, 11(1), doi:10.1080/20008198.2020.1815283

Greenberg, N., Weston, D., Hall, C., Caulfield, T., Williamson, V., & Fong, K. (2021). Mental health of staff working in intensive care during COVID-19. Occupational Medicine, doi:10.1093/occmed/kqaa220

Greene, T., Harju-Seppänen, J., Adeniji, M., Steel, C., Grey, N., Brewin, C. R., ... Billings, J. (2021). Predictors and rates of PTSD, depression and anxiety in UK frontline health and social care workers during COVID-19. European Journal of Psychotraumatology, 12, 1.

Gustavsson, J., & Beckman, L. (2020). Compliance to recommendations and mental health consequences among elderly in Sweden during the initial phase of the COVID-19 pandemic – A cross sectional online survey. International Journal of Environmental Research and Public Health, 17(15), 5380. doi:10.3390/ijerph17155380

Javakhishvili, J. D., Ardino, V., Bragesjö, M., Kazlauskas, E., Oliff, M., & Schäfer, I. (2020a). Trauma-informed responses in addressing public mental health consequences of the COVID-19 pandemic: Position paper of the European Society for Traumatic Stress Studies (ESTSS). European Journal of Psychotraumatology, 11 (1), doi:10.1080/20008198.2018.1708782

Javakhishvili, J., Ardino, V., Bragesjö, M., Gorniak, J., Kazlauskas, E., Schäfer, I., ... Williamson, V. (2020b). ESTSS recommendations on mental health and psychosocial care during pandemics. https://estss.org/wp-content/uploads/2020/05/ESTSS.Covid-19-Recommendations-2020-26-May.pdf

Institute of Medicine (IoM). (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington, DC: The National Academies Press. doi:10.17226/12480

Instituto Nacional de Saúde Doutor Ricardo Jorge. (2020). Mental health in times of pandemic (SM-COVID19). http://www.insa.min-saude.pt/sm-covid19-saude-mental-em-tempos-de-pandemia-relatorio-final. 

Kenntemich, L., Hinrichsen, I., Freyberg, R. C., Lau, W., O’Donnell, M., & Lotzin, A. (2021). Acceptability of the videoconference-based SOLAR program to reduce subclinical distress in trauma survivors – A pilot study conducted during the COVID-19 pandemic. Presentation at Virtual ESTSS Conference 2021. European Journal of Psychotraumatology, 12, 1940588. doi:10.1080/20008198.2021.1940588

Kivi, M., Hansson, I., & Bjälkebring, P. (2021). Up and about: Older adults’ well-being during the COVID-19 pandemic in a Swedish longitudinal study. The Journals of Gerontology: Series B, 76(2), e4–e9. doi:10.1093/geronb/gbaa084

Kühlmann, S., Hellström, M., Ramberg, U., & Reiter, R. (2021). Tracing divergence in crisis governance: Responses to the COVID-19 pandemic in France, Germany and Sweden compared. International Review of Administrative Sciences, 0020852320979359.

Lamb, D., Greenberg, N., Stevelink, S., & Wessely, S. (2020). Mixed signals about the mental health of the NHS workforce. The Lancet Psychiatry, 7(12), 1009–1011. doi:10.1016/S2215-0366(20)30379-5

Lamb, D., Gnanapragasam, S., Greenberg, N., Bhundia, R., Carr, E., Hotopf, M., ... Wessely, S. (2021). The psychosocial impact of the COVID-19 pandemic on 4,378 UK healthcare workers and ancillary staff: initial baseline data from a cohort study collected during the first wave of the pandemic. medRxiv; published online Jan 22. https://doi.org/10.1101/2021.01.21.20240887.

Linden, M., & Maercker, A. (2011). Embitterment: Societal, psychological and clinical perspectives. New York: Springer.

Löhmus, M., Stenfors, C. U. D., Lind, T., Lauber, A., & Georgelis, A. (2021). Mental health, greenness, and nature related behaviors in the adult population of Stockholm County during COVID-19-related restrictions. International Journal of Environmental Research and Public Health, 18(6), 3303. doi:10.3390/ijerph18063303

Lotzin, A., Krause, L., Acquarini, E., Ajdukovic, D., Ardino, V., Arnborg, F., … ADJUST Study Consortium. (2021). Risk and protective factors, stressors, and symptoms of adjustment disorder during the COVID-19 pandemic – First results of the ESTSS COVID-19 pan-European ADJUST study. European Journal of Psychotraumatology, 12, 1964197. doi:10.1080/20008198.2021.1964197

Lotzin, A., Hinrichsen, I., Kenntemich, L., Freyberg, R.C., Lau, W., Gibson, K., & O’Donnell, M. (2021). “Skills for Life Adjustment and Resilience” Programm. Psychotherapeut (Berlin), 66(6), 533–542. doi:10.1007/s00278-021-00535-0

McCracken, L., Badinlou, F., Buhrman, M., & Brocki, K. (2020). Psychological impact of COVID-19 in the Swedish population: Depression, anxiety, and insomnia and their associations to risk and vulnerability factors. European Psychiatry, 63(1), E81. doi:10.1192/eurjspychi.2020.81
Makhashvili, N., Javakhishvili, J. D., Pilauri, K., Sturua, L., Fuhr, D., & Roberts, B. (2020). The influence of concern about COVID-19 on mental health in the Republic of Georgia: A cross-sectional study. *Globalization and Health, 16*, 111. doi:10.1186/s12992-020-00641-9

Makhashvili, N., & Javakhishvili, J. D. (2021). Ilia State University Counselling Service Report for 2020 and 2021 [in Georgian].

Moreno, C., Wykes, T., Galderisi, S., Nordentoft, M., Crossley, N., Jones, N., et al. (2020). How mental health care should change as a consequence of the COVID-19 pandemic. *The Lancet Psychiatry, 7*(9), 813–824.

Nummer gegen Kummer. (2021, February). Press release of 18.02.2021 https://www.nummergegenkummer.de/aktuelles/presse/.

Olff, M., Primasari, I., Qing, Y., Coimbra, B. M., Hovnanyan, A., Grace, E., … the GPS-CCC Consortium (2021). Mental health responses to COVID-19 around the world. *European Journal of Psychotraumatology, 12*(1), 1929754.

Peters, A., Rospleszc, S., Greiser, K. H., Dallavalle, M., & Berger, K. (2020). The impact of the COVID-19 pandemic on self-reported health. *Deutsches Ärzteblatt International, 117*(50), 861–867. doi:10.3238/arztebl.2020.0861

Petzold, M. B., Bendau, A., Plag, J., Pyrkosch, L., Mascarell Maricic, L., Betzler, F., … Ströhle, A. (2020). Risk, resilience, psychological distress, and anxiety at the beginning of the COVID-19 pandemic in Germany. *Brain and Behavior, 10*(9), e01745.

Pierce, M., Hope, H., Ford, T., Hatch, S., Hotopf, M., John, A., … Abel, K. M. (2020). Mental health before and during the COVID-19 pandemic: A longitudinal probability sample survey of the UK population. *The Lancet Psychiatry*, doi:10.1016/s2215-0366(20)30308-4

Rück, C., Mataix-Cols, D., Malki, K., Adler, M., Flygare, O., Runeson, B., & Sidorchuk, A. (2020). Will the COVID-19 pandemic lead to a tsunami of suicides? A Swedish nationwide analysis of historical and 2020 data. *medRxiv, 2020.2012.2010.20244699*. https://doi.org/10.1101/2020.12.10.20244699.

Swedish Public Health Agency. (2021). The Covid-19 pandemic and mental health in the population: What do longitudinal studies indicate? [Swedish] website accessed at April 19, 2021 from https://www.folkhalsomyndigheten.se/livsvarillkor-levnadsvanor/psykisk-halsa-och-suicidprevention/psykisk-halsa/covid-19-och-psykisk-halsa/covid-19-pandemin-och-befolkningens-psykiska-halsa/.

Thomas & Clyne. (2021). Responding to shocks: 10 lessons learned for government. Institute for Government. https://www.instituteforgovernment.org.uk/sites/default/files/publications/responding_shocks_lessons_covid_brexit.pdf.

UKASK, Unabhängige Kommission zur Aufarbeitung sexuellen Kindesmissbrauchs. (2020). Zweite Auswertung einer Online-Befragung. Belastungen und Entlastungen von Betroffenen sexualisierter Gewalt in Kindheit und Jugend in der Corona-Pandemie. https://www.aufarbeitungskommission.de/mediathek/format/publikation/.

Violante, T., & Lanceiro, R. T. (2021). The response to the COVID-19 pandemic in Portugal: A success story gone wrong. *VerfBlog. https://verfassungsblog.de/the-response-to-the-covid-19-pandemic-in-portugal-a-success-story-gone-wrong/. doi:10.17176/20210304-154039-0.*

Wasserman, D., Issue, M., Wuestefeld, A., & Carli, V. (2020). Adaptation of evidence-based suicide prevention strategies during and after the COVID-19 pandemic. *World Psychiatry, 19*(3), 294–306. doi:10.1002/wps.20801

Williamson, V., Murphy, D., & Greenberg, N. (2020). COVID-19 and experiences of moral injury in frontline key workers. *Occupational Medicine, 70*(5), 317–319. doi:10.1093/occmed/kqaa052

Wessely, S. (2021). COVID-19 pandemic: Not like any other? Key note speech at the ESTSS Virtual Conference “Trauma and Mental Health during Global Pandemic”, June 17–18, 2021.