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

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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 in the countries in focus. No 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.

Lidiando con la pandemia COVID-19 en Europa: Cinco lecciones de la Sociedad Europea de Estudios del Estrés Traumático

Este artículo proporciona información sobre las consecuencias para la salud mental de la pandemia por la COVID-19 en las subregiones Central, Oriental, Nórdica, Meridional y Occidental de Europa, representadas por cinco países miembros de la Sociedad Europea de Estudios del Estrés Traumático (ESTSS). Sobre la base de las investigaciones y experiencias nacionales existentes en estos países, proponemos cinco lecciones aprendidas: 1. No hay evidencia de una pandemia de salud mental hasta el momento en los países en estudio. No se observa un aumento de los trastornos mentales severos, pero sí un aumento de los síntomas de los trastornos de salud mental comunes. Se necesitan más estudios longitudinales de alta calidad para entender la carga de salud mental de la pandemia; 2. La pandemia afecta a los países (incluida la situación de salud mental) en forma diferente según el nivel de exposición, las políticas de gestión, las características estructurales previas a la pandemia y los recursos de atención en salud; 3. La pandemia afecta a las personas de distintas maneras: la severidad de exposición a los estresores relacionados con la pandemia difiere entre las personas, así como los recursos individuales para hacer frente a estos factores estresantes. Hay ganadores y perdedores así como grupos de riesgo identificables que necesitan atención especial; 4. Además de las consecuencias negativas, la pandemia ha tenido un impacto positivo. Las innovaciones aplicadas rápidamente dentro del sistema de respuestas de atención de la salud son una ventana de oportunidad para cambios positivos en las políticas, estrategias y prácticas de atención de la salud mental. El aumento del

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关键词

COVID-19、欧洲、ESTSS、公共心理健康、疫情、应激知情、创伤知情

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.

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enfoque en la salud mental durante la pandemia puede contribuir a la priorización de problemas de salud mental en los niveles organizacionales y de formulación de políticas y podría reducir el estigma; 5. Se requieren respuestas frente a la COVID-19 informadas en estrés y en trauma. La comunidad europea de psicotraumatólogos, bajo el liderazgo de la ESTSS, juega un papel importante en la promoción de la atención en salud informada en estrés y trauma y las políticas de gestión de pandemias. Basados en las lecciones aprendidas, proponemos un modelo de salud mental pública de atención escalonada para la prevención de las consecuencias adversas de salud mental durante las pandemias.

应对欧洲 COVID-19 疫情：欧洲创伤应激研究学会的五个经验教训

该论文提供了以欧洲创伤应激研究协会 (ESTSS) 的五个成员国为代表的欧洲中部、东部、北欧、南部和西部子区域的 COVID-19 疫情的心理后果的见解。根据这些国家现有的国民研究和经验，我们提出五个吸取的经验教训：1. 至今无证据表明重点关注的国家发生了心理健康疫情。可以观察到严重精神障碍没有增加，但常见心理健康障碍的症状有所增加。需要更多高质量的纵向研究来了解疫情的心理负担；2. 疫情对各国（包括心理健康状况）的影响不同，取决于暴露程度、管理政策、疫情前的结构特征和医保资源；3. 疫情对人的影响不同：个体对疫情相关应激源的暴露程度以及应对这些应激源的资源不同。有赢家 and 输家以及可以识别的需要特别注意的风险群体。4. 除了负面影响外，疫情还产生了积极影响。医保响应系统内迅速应用的创新是精神保健政策、战略和实践发生积极变化的机会之窗。在疫情期间对心理健康的更多关注可能有助于在政策制定和组织层面优先考虑心理健康问题，并可能减少污名化；5. 需要对 COVID-19 做出应激和创伤知情反应。在 ESTSS 的领导下，欧洲精神创伤学家共同体在促进应激和创伤知情的医疗保健和疫情管理政策方面发挥着重要作用。基于吸取的经验教训，我们提出了一种分步护理公共心理健康模型，用于预防疫情期间的不良心理健康结果。

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, Smid, Smit, Kazlauskas, & 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. COVID-19-related mental health burden in five European countries

The pandemic management policies in the five countries differ in a number of characteristics, such as the scale of lockdown and extent to which coercive measures have been implemented, the scale and variety of economic support measures, structural characteristics, and the capacity of healthcare systems to satisfy treatment demand and implement preventive interventions (see Supplementary Table S1). All these factors, in combination with the national pre-pandemic circumstances, create a unique set of social determinants in each country, which influences the mental health burden of the pandemic.

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 burn-out 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 (Kuhlmann, 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% (Nunmer 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; Kennetmich 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 population and healthcare staff in hospitals; (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 (Löhmus, 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 (Waserman, 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 (Olf 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 health-care policies and services, as well as towards reducing mental health stigma. For example, in the UK, an

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
<i>Universal prevention:</i> <i>Addressing mental health needs in the general population</i>		
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: <u>At societal level:</u> public information campaign promoting self-care and positive coping (e.g. setting up daily routines, focusing on the positive things in a day) <u>At organizational level:</u> promoting a stress- and trauma-informed organizational culture, introducing staff care practices, enabling supervisors to conduct mental health conversations <u>At individual level:</u> information sheets, apps, websites, and online training for self-care and healthy living
<i>Selective prevention:</i> <i>Addressing mental health needs of at-risk groups</i>		
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: <u>At-risk groups/vulnerable communities level:</u> enhancing group resilience interventions (e.g. information sheets, online training of community activists, youth self-help and peer support) <u>Organizational level:</u> 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. <u>Individual level:</u> apps, information sheets, web-based self-help, counselling, etc.
<i>Indicated prevention and early intervention:</i> <i>Addressing mental health needs of individuals with mental health symptoms and/or diagnosis</i>		
Governmental policies promoting equal access to mental healthcare via developing corresponding infrastructure (mental healthcare services, internet access, etc.)	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): • <u>Individual level:</u> 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) • <u>Family level:</u> online or face-to-face couple or family counselling, etc.
<i>Treatment</i>		
	Providing treatment and appropriate care to individuals in need of mental health treatment	Online or face-to-face psychotherapy, pharmacological treatment, multidisciplinary case management, etc.
<i>Continuous care</i>		
	Providing treatment and psychosocial rehabilitation to individuals in need of continuous mental healthcare	Online or face-to-face psychotherapy, pharmacological treatment, multidisciplinary case management, community-based outreach interventions, etc.

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.

Such a perspective can be provided by the professional community of psychotraumatologists. The ESTSS plays an important role in contributing towards a systematic stress- and trauma-informed mental health response to the pandemic in Europe (Javakhishvili, Ardino, Bragesjö, Kazlauskas, et al., 2020; Javakhishvili, Ardino, Bragesjö, Gorniak, et al., 2020). Even more should be done to ensure that the newly accumulated evidence informs pandemic management policies in a timely manner. The academic journals create an excellent avenue for professional exchange, but they often do not reach key stakeholders outside academic circles, such as policymakers, problem-bearers, and the public. We need to translate our academic outlet to policy documents, and increase interdisciplinary interchange with other professional societies and stakeholders, to advocate for and promote stress- and trauma-informed policies, strategies, and practices in Europe amid the pandemic.

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 explore further 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

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