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Pan-European Response to the Impacts of COVID-19 and
Future Pandemics and Epidemics

Health Inequalities from the perspective of COVID-19's impact on the mental health of specific vulnerable groups

Deliverable 2.4

PERISCOPE

Pan-European Response to the ImpactS of COVID-19 and future Pandemics and Epidemics

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016233

Deliverable No. 2.4

Health inequalities from the perspective of COVID-19's impact on the mental health of specific vulnerable groups

Due date: 31/10/2023
Submitted on: 30/10/2023

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<table>
<tr><th colspan="3">Deliverable Type</th></tr>
<tr><td>R</td><td>Document, report</td><td>X</td></tr>
<tr><td>DEM</td><td>Demonstrator, pilot, prototype</td><td></td></tr>
<tr><td>DEC</td><td>Websites, patent fillings, videos, etc.</td><td></td></tr>
<tr><td>OTHER</td><td></td><td></td></tr>
<tr><th colspan="3">Dissemination Level</th></tr>
<tr><td>PU</td><td>Public</td><td>X</td></tr>
<tr><td>CO</td><td>Confidential (Consortium members including the Commission Services)</td><td></td></tr>
<tr><td>CI</td><td>Classified Information (Commission Decision 2015/444/EC)</td><td></td></tr>
<tr><th colspan="3">Deliverable History</th></tr>
<tr><th>Date</th><th>Version</th><th>Author/Contributor</th></tr>
<tr><td>30/10/2023</td><td>V1 (development of contents)</td><td>Fatima Awil, Marta Dell'Aquila, Ilse Derluyn, Carmen Diaconu, Simon Ducarroz, Domantas Jasilionis, Charlotte Hawkins, Emma Martínez Sanchez, Eva Spiritus-Beerden</td></tr>
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In addition to the authors and contributors, FEAM warmly thanks the following people for their valued contributions and support in the production of this report: Dr. Robin Fears, Senior Scientific Policy Advisor, FEAM; Prof. George Griffin, Past President, FEAM and Emeritus Professor of Infectious Diseases and Medicine at St George's, University of London; Sara Ekabiki Ossete, Intern, FEAM; Laure Guillevic, Former Policy Officer, FEAM; Associate Professor Anna-Clara Hollander, Karolinska Institutet.

FEAM also thanks all the partners involved in this report, as well Professor Bo Burström for his valuable review. Moreover, FEAM warmly thanks the Karolinska Institutet team and all the experts and people who contributed to this report.

Disclaimer: *Opinions expressed in this report do not necessarily represent the views of the Federation of European Academies of Medicine (FEAM) and its Member Academies, nor all PERISCOPE partners.*

Suggested citation: PERISCOPE (2023). *Health inequalities from the perspective of COVID-19's impact on the mental health of specific vulnerable groups*. EU Horizon 2020.

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report (D2.4) is part of the EU-funded Horizon—2020 PERISCOPE project. It focuses on health inequalities from the perspective of the mental health impact of COVID-19 on particular vulnerable groups. It brings together contributions from multidisciplinary partners who have been conducting empirical and theoretical research on this topic for the last three years since the start of the COVID-19 pandemic.

The report, D2.4—led by the Federation of European Academies of Medicine (FEAM)—presents contributions from PERISCOPE partners, including the Stefan S. Nicolau Institute of Virology (IVN), the London School of Economics and Political Science (LSE), Mental Health Europe (MHE), Ghent University (UGENT), and the National Institute of Health and Medical Research (INSERM). In line with the global objective of the PERISCOPE project, this report aims to evaluate the direct and indirect impacts of COVID-19 on the mental health of specific vulnerable groups, as well as deepening the concept of 'health inequalities'—already explored in the previous *Analytical report on health inequalities with emphasis on vulnerable groups.*[1] The overall report presents robust evidence and insights that can effectively inform policymakers on crafting evidence-based policies and strategies, as well as on good practices.

This report is structured around three key sections:

- An initial and broader overview examines recent evidence on **mortality and life expectancy, as well as suicide mortality differences of vulnerable groups according to their socioeconomic status (SES) in modern welfare states**. It presents the potential and limitations of classical welfare state typologies to explain international disparities in mortality inequalities, particularly regarding COVID-19, and how suicide should be recognised as a precise indicator of mental health.
- A second section is dedicated to analysing the **emerging forms of inequalities** resulting from the COVID-19 pandemic, which in turn have generated new

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[1] See: PERISCOPE (2021). *Analytical report on health inequalities with emphasis on vulnerable groups*. EU Horizon 2020. https://backend.periscopeproject.eu/multimedia/periscope/5KVTsNKMU-d2.2---analytical-report-on-health-inequalities-with-emphasis-on-vulnerable-groups.pdf.

vulnerabilities. A first section, authored by IVN, focuses the analyses on the impact of COVID-19 on healthcare professionals, with special attention paid to the training and mental health of resident physicians in Romania, a group who became particularly vulnerable during the pandemic. Subsequently, LSE presents a case study on the effects of COVID-19 on the mental health and overall well-being of specific people in the United Kingdom (UK), specifically; younger people and people from racially minoritised communities. Through a fresh anthropological perspective, LSE's contribution emphasises how mental health challenges have been exacerbated by new forms of inequality generated by COVID-19, like the shift in care responsibilities, trauma from healthcare racism, and anxiety over school closures.

- The third section of this report dedicates its analyses to the **mental health of specific vulnerable populations**: migrant and refugees' populations, and persons experiencing homelessness (PEH). MHE's contribution presents the impact of regulations on migrants with psychosocial disabilities and mental health problems. By identifying the challenges and discriminatory practices these vulnerable migrants face, it suggests how an intersectional approach in policy could facilitate the recognition and understanding of their mental health requirements and challenges throughout the migration cycle. The study provided by the University of Ghent offers valuable insights into the impact of the COVID-19 pandemic on the mental health of migrants and refugees. It effectively illustrates how increased social interaction and reduced feelings of social isolation can contribute to improved mental well-being among this population. Last, INSERM's contribution, through statistical evidence, shows how the high levels of depression experienced by PEH during the COVID-19 pandemic were significantly worsened by future instability and economic repercussions, exacerbating the harmful impacts on their mental health.

Taken together, these results have led to a discussion on how and why policies might generate and shape different kinds of health inequalities. The results from this discussion imply the need to reconsider the concept of 'vulnerability' in public policies and suggest adopting a more comprehensive and integrated approach to mental health issues in public policies.

Based on these premises and the evidence collected, the report concludes by presenting some recommendations to policymakers, generated through a collaborative exercise with both partners involved in the project as well as with external experts, aiming at reducing the direct and indirect impacts on mental health generated by COVID-19, particularly for vulnerable groups. These recommendations have been assembled into four main clusters and scopes to orient, inform, share, and implement good practices more generally:

1. **Improving general health data collection on mental health**. The pandemic revealed the need to improve health data production, sharing, and infrastructure, in order to properly address physical and mental health challenges. There is a need to improve monitoring, understanding, decision-making, and evidence-based policies to ensure effective health interventions and foster resilient societies.
2. **Addressing health inequalities and their impact on mental health.** Health inequalities have been amplified by the pandemic. Conducting a comprehensive analysis to systematically assess and quantify the disparities in health outcomes, both physical and mental, among different social groups, should become a priority. Urgent steps are needed to identify complex determinants and solutions, including those influencing mental health.
3. **Fostering social connectedness.** Enhancing a sense of belonging, cohesion, and mutual support within communities would promote meaningful relationships and a stronger support network, which could increase the overall well-being of individuals and prevent mental health issues.

4. **Improving equitable pandemic preparedness and response policies.** International and national bodies need to develop and implement response strategies in order to mitigate the harmful impacts of infectious diseases on vulnerable populations and their mental health.

This report focuses on the impact of COVID-19 on the mental health of specific vulnerable groups. In order to explore the consequences suffered by the general population in different European countries, read the PERISCOPE report D2.3 "Mental health impacts in different European populations", conceived, and published parallel to this report.

INTRODUCTION

INTRODUCTION

The Pan-European Response to the ImpactS of COVID-19 and future Pandemics and Epidemics (PERISCOPE) project is a EU-Horizon 2020 research project composed by 15 work packages, and it is part of the Coronavirus Global Response Initiative, launched in May 2020 under the leadership of the European Commission President, Ursula von der Leyen.

With the main objective of bringing clarity on the broad socio-economic and behavioural impacts of COVID-19, PERISCOPE's work package 2 (WP2) on Mental Health and Health Inequalities explores how the COVID-19 pandemic has been affecting healthcare inequalities in Europe. The writing of this report has been coordinated by the Federation of European Academies of Medicine (FEAM), representing a consortium of National Medical Academies, and its membership network consists of 23 National Academies of Medicine, Veterinary Science, and Pharmacy, representing 19 countries within the European region of the World Health Organisation (WHO).

In the framework of WP2, this report presents the findings of the research conducted on the topic of health inequalities, with a focus on the mental health of vulnerable groups, and has been facilitated by consolidating partners' contributions. This report has been published in parallel with the PERISCOPE report D2.3 *Mental health impacts in different European populations*, authored by KI. Aiming to explore mental health impacts in different European populations, report D2.3 maps self-reported mental health problems, the time-trends in psychiatric care utilisation in a few European countries, and psychiatric care utilisation before and during the COVID-19 pandemic in Sweden from the perspective of the general population.

Reminder

Box 1: Terminology (Source: PERISCOPE, 2021: 9)

Health inequalities: Differences in health outcomes driven by socioeconomic factors[2] or determinants of health (e.g., education, occupation, housing, income, and other key factors). As health inequalities are, to large extent, driven by avoidable differences in socioeconomic conditions

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[2] More precisely, between socio-economic groups.

(both between countries as well as between different population groups) causing unequal health outcomes, tackling them is considered a fairness and social justice issue (Marmot, 2011).

Socio-economic determinants of health: Conditions in which people are born, grow, live, work, and age that have an impact on their health (WHO, 2021). According to WHO, these conditions are further shaped by wider economic conditions, social policies, and political forces, including the distribution of money, power, and resources at global, national, and local levels.

As already pointed out in the *Analytical report on health inequalities with emphasis on vulnerable groups* [hereinafter: *Interim Report*], a previous PERISCOPE deliverable (D2.2) of this work package, vulnerable groups are characterised by specific social determinants of health. Social determinants of health are the conditions in which people are born, grow, live, and age; the non-medical factors that influence health outcomes. They are influenced by policies, political systems, and social norms that shape the conditions of daily life. Altogether, the social determinants of health have a profound impact on health outcomes, with people with lower socioeconomic status having worse health, resulting in health inequalities.

From this perspective, the theoretical background of the present report, developed from the *Interim report*, enables our focus on the impact of the COVID-19 pandemic and associated policies on the mental health of specific vulnerable groups: healthcare professionals (HCP), younger people, and people from racially minoritised communities, migrant and refugee populations, persons experiencing homelessness (PEH), and people with disabilities.

Box 2: "Vulnerability" and "vulnerable groups": a complex definition

The *corpus* of literature concerning vulnerability is extensive and very diverse. A unique definition of this concept is difficult to establish, since its specific characteristics vary from one discipline and context to another (Alwang et al., 2001), as do its practical ramifications. In the last two decades, it began to be a subject of discussion in public policy debates, particularly those focused on "alleviating poverty, promoting upward social mobility, and empowering citizens" (ECLAC, 2002).

Vulnerability may characterise "an individual, a community, assets, or systems" (UNDRR), but, in general, refers to a condition of being susceptible to harm. Within this framework, other *related* notions are appearing. Against the well-established and often criticised concept of "formal equality", veritable "vulnerability theories" (Fineman, 2008; Kohn, 2014; Young, 1990) are seeing the light; intersectionality is more and more employed to show how discrimination is the complex result of concomitant and interconnected identities, relationships, and social factors (Crenshaw, 1989, 1991; UN Women, 2022); the concept of "multidimensional vulnerability" is gaining ground, particularly within UN circles, in order to describe how different—both internal and external—factors and circumstances may affect the condition of "vulnerability" of different "vulnerable populations".

The 2030 Agenda for Sustainable Development identified "all children, youth, persons with disabilities (of whom more than 80% live in poverty), people living with HIV/AIDS, older persons, indigenous people, refugees, and internally displaced persons and migrants [and] people living in areas affected by complex humanitarian emergencies and in areas affected by terrorism" (UN General Assembly, 2015, para. 23) as vulnerable people who merit "further effective measures and actions" (*Ibidem*), globally.

Nevertheless, it must be noted that several academics have reacted against the vagueness and stigma that the notion of "vulnerable groups" may entail (Munari et al., 2021; Walker, Fox, 2018), including in public health (McLaren et al., 2020). Katz et al. (2019), for example, underlined the misuse of this notion in public health, whose use tends to hide the underlying structural factors that contribute to inequality.

Other expressions, like "people in a position of vulnerability" (OHCHR)[3] or "marginalised people", as well as "marginalisation" instead of "vulnerability", have been presented as possible alternatives.

The *Interim Report* previously underlined how vulnerable groups, specifically refugees and internally displaced persons (PERISCOPE, 2021), may be affected by multiple and intersected vulnerabilities[4]. It brought attention to the fact that, although designating certain groups as "vulnerable" can be beneficial when it comes to directing attention and resources towards their specific needs, it also presents some drawbacks. Culture, age, and gender might delineate individual needs, and this might lead to neglecting some non-targeted individuals requiring substantial support, even within the same vulnerable group, if they don't fit into category designated as "extra-vulnerable". To address these challenges, it concluded by proposing a shift toward a needs-based approach that assesses individual requirements for care and support rather than relying solely on group-level vulnerability classifications, in order to avoid potential negative consequences.

Accordingly, the present report stresses the importance of considering the internal and intersecting differences and needs of individuals belonging to vulnerable groups. Emphasising the significance of tailored support that addresses individual needs rather than relying solely on group categorisations is crucial, and this approach demands immediate attention and consideration.

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[3] See: https://www.ohchr.org/en/special-procedures/sr-health/non-discrimination-groups-vulnerable-situations.

[4] This section of the report was based on Derluyn, 2018 and Derluyn, van Ee, and Vindevogel, 2018.

Rationale: from D2.2 to D2.4

The present report should be considered a *continuum* of the previous *Interim Report*. The literature review performed in the *Interim Report*, delivered in October 2021, confirmed that ethnic minority groups and groups with disadvantaged social determinants of health showed worse COVID-19 outcomes in terms of incidence, hospital admission, and mortality than other socioeconomic groups. Intended to guide prevention and management of ongoing and expected mental health impacts, it also mapped trends on affective disorders, healthcare utilisation, suicide, and other mental health outcomes. The findings pointed towards an increase in affective disorders, a dip in primary mental healthcare utilisation in spring 2020, and lower incidence rates of common mental health problems in the population at large. In younger age groups, the findings pointed to incidence rates typically returning or superseding expected levels in the latter half of 2020.

Studies included in that report (PERISCOPE, 2021: 62–69) further suggested an impact of the pandemic on the mental health of specific populations (unhoused, migrants, and minority ethnic groups). For example, a repeated cross-sectional multi-centric mixed methods study of 41 shelters in Paris, Lyon, and Strasbourg areas during spring 2020 (the Echo study), found moderate signs of depression in 17% of cases and severe signs of depression in 10% of the population (Scarlett et al., 2021). The ApartTogether study, an online global survey that sought to assess the mental health of refugees and migrants during the COVID-19 pandemic, which surveyed over 20,000 respondents of which 40% were from Europe, found that 22% of respondents reported worsening discrimination based on ethnicity and over 50% reported worsening of access to work, safety, and financial means, which were having an impact on their mental health. The study also indicated that 60% of respondents reported more feelings of depression and worries than before the pandemic.

Since the compilation of our *Interim report*, there have been a number of other publications on mental health during the COVID-19 pandemic. A recent systematic review and meta-analysis of the literature (Sun et al., 2023) concluded that across population groups, there was a high level of resilience during COVID-19 and changes in general mental health have been minimal (see: Report D2.3 *Mental health impacts in different European populations*). Interpretation of the intersecting factors determining these conclusions is complex, and additional findings from WHO and EU Commission assessments will be discussed subsequently. However, the systematic review by Sun et al. (2023) acknowledged that there had been few robust studies involving vulnerable groups, and it is possible that some groups experience mental health issues that differ from those of the general population.

The preparation of the preceding PERISCOPE *Interim Report* included several stages and opportunities for discussion. During the different steps that led to the *Interim Report*, different topics were highlighted as interesting to investigate regarding health inequalities, among others: ageing and older populations, non-communicable diseases and health behaviours, suicide rates and mortality excess, health literacy, the privation of health systems, and mental health.

Several of these topics have been explored elsewhere in the PERISCOPE project. For example, the welfare of patients with chronic diseases during the COVID-19 pandemic was expounded in the *Analytical report comparing recovery strategies at the national and regional levels* (PERISCOPE, 2023). The impact of the pandemic on health systems was the focus of a whole work package led by the Institute of Advanced Studies.

Attention to mental health was increasing at the time of the publication of the previous *Interim Report* at the end of 2021. The *World Mental Health Report: Transforming Mental Health for All* (WHO, 2022) highlighted that people who endure less favourable circumstances are at higher risk of experiencing mental health conditions. Estimates included in the report list the rise in both anxiety and depressive disorders at more than 25% during the first year of the pandemic. Despite the reported rise in mental health problems, the pandemic severely disrupted mental health services and widened the treatment gap for mental health conditions.

The second inflexion point in the discourse around mental health in Europe came from Commission President Ursula von der Leyen during the 2022 State of the Union speech[5] in September 2022. In her statement, the President launched the Commission's intention to present "a new initiative on mental health". The initiative, launched on June 7, 2023, (EC, 2023b), included five pillars that underpin the new "approach to mental health", which revolve around prevention, early detection, occupational risk, support, treatment, and quality of life. Defined as "a starting point for a […] comprehensive, prevention-oriented and multi-stakeholder approach to mental health, […] developed after extensive consultation with Member States, stakeholders, and citizens, the new approach recognises that mental health is about more than just health and, therefore, strongly involves areas such as education, digitalisation, employment, research, urban development, environment and climate" (EC, 2023a).

In this Communication, we clearly acknowledged some worrying statistics[6]. Even prior to the COVID-19 pandemic, mental health issues impacted approximately 84 million people in the

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[5] See: https://ec.europa.eu/commission/presscorner/detail/ov/speech_22_5493.

[6] Disclaimer: the following paragraphs are based on EC, 2023b.

EU, or one in six individuals. The pandemic posed a significant threat to mental well-being, particularly for young individuals and those already coping with mental health conditions. The period of the pandemic witnessed a doubling of loneliness among people in the EU compared to pre-pandemic years, reaching 26% in certain regions. Factors like heightened loneliness, reduced social interactions, concerns about personal and loved ones' health, uncertainty about the future, and anxiety stemming from fear and loss have all contributed to the emergence of post-traumatic stress disorders.

Regarding its three guiding principles and twenty flagship initiatives, which identify financing opportunities totalling EUR 1.23 billion, the initiative aims to make mental health "a major public policy goal to ensure that no one is left behind, that citizens have equal access to prevention and mental health services across the EU, and that reintegration and social inclusion guides collective action addressing mental health illnesses" (EC, 2023a)[7].

In line with this urgent policy-related human need, PERISCOPE partners decided to focus this final analytical report on health inequalities on the mental health of specific vulnerable groups. To put into broader perspective the health of vulnerable groups, including their mental health, and COVID-19 related inequalities, we included in this report a study on general mortality inequalities by socioeconomic status, focusing on types of social welfare states across European countries. Building on specific evidence, this study examines the overall inequalities in mortality and life expectancy based on socioeconomic status, with a specific focus on the various social welfare state models across the EU.

This report expands our understanding on COVID-19's impact on the mental health of specific vulnerable groups and seeks to support policymaking pursuing equality in the mental health outcomes of at-risk groups.

Report summary and policy outcomes

This report develops through three main sections, in which authors present their research from different disciplinary perspectives: (1) a first section, dealing with mortality inequalities in socio-economic status, focusing on types of social welfare states; (2) a second section, focusing on new forms of inequalities generated by the COVID-19 pandemic; and (3) a third section exploring the consequences of COVID-19 on the mental health of specific vulnerable

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[7] To read more about the initiative and the related projects, see: EC, 2023a, 2023b.

populations (migrant and refugee populations, and persons experiencing homelessness). These main parts are followed by a policy discussion and related recommendations.

The objective of this report is two-fold. On the one hand, in its different chapters, it aims to provide evidence of health inequalities and the impact of COVID-19 on the mental health of specific vulnerable groups. On the other hand, based on the evidence emerging in the research partners and involved experts, this report offers a compendium of interrelated recommendations, which may inform and guide the implementation of evidence-based policies and initiatives to deal with mental health challenges more generally.

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1. General mortality inequalities by socio-economic status (SES), focusing on type of social welfare state

1. General mortality inequalities by socio-economic status (SES), focusing on type of social welfare state

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Executive summary

This chapter systematically outlines the most recent findings concerning the extent and shifts over time in mortality and longevity (life expectancy) by socio-economic status (SES) in developed modern welfare states. Special attention is given to exploring the advantages and constraints of using traditional welfare state regime classifications to explain international differences in the size of mortality inequalities.

Introduction

Mortality and life expectancy are the key measures of population health. Different from many other health characteristics, aggregated mortality measures such as death rates and life expectancy are the most precise and comparable measures, allowing for credible international comparative and temporal analyses. Therefore, mortality estimates have also been used to monitor the effectiveness of health and social policies and the successes or failures of socioeconomic development. In particular, sustainable and equitable progress in life expectancy—reflecting prospects of human longevity—has been considered an important aim in numerous international and national policy documents.

Assessment of the magnitude and directions of changes in mortality inequalities by socioeconomic status (SES) remains quite complex due to data and measurement challenges. First, relatively few countries have register-based or census-linked mortality data that would permit reliable assessment of group-specific mortality. Second, available international evidence is often barely interpretable, depending on the data and measurement approaches used to assess mortality inequalities by SES. Finally, there is no consensus in the scientific community about potential mechanisms explaining these inequalities (ALLEA, FEAM, 2018). These reasons are important obstacles to developing and implementing appropriate and effective policies.

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The available international studies on mortality inequalities by SES often provide quite complex and unexpected findings. In part, their conclusions depend on how SES is defined (e.g., education, occupation, or income) and the -specifics of inequality measures. However, they also conclude that no easy ways exist to establish associations between general societal characteristics or policies and health inequality outcomes (Bambra, 2011). For example, it has been shown that established pro-equitable policies and a robust social security system do not automatically mean lower mortality inequalities by SES (Mackenbach, 2017). Controversial evidence about high mortality inequalities in Nordic countries with strong social welfare provisions, called the "Nordic paradox" (Mackenbach, 2017), points to the challenges of using ideal/classical welfare state (and other) classifications.

Theoretically, social welfare typology and the assumption that the welfare state is a mediator between socioeconomic position and health provide excellent opportunities to identify the potential of policies targeting health inequalities by addressing the social determinants of health (Hillier-Brown et al., 2019). However, this approach may only be fully applied if a causal relationship exists between the SES and health/mortality. Meanwhile, the reality might be much more complex, due to the possible impact of other mechanisms, such as health selection and the confounding effects of characteristics related to mortality/health and SES (ALLEA, FEAM, 2018; 2021).

This chapter aims to systematically describe the most recent evidence about the magnitude and temporal changes in mortality and longevity (life expectancy) by SES in developed modern welfare states, with a particular focus on the potential and limitations of applying classical welfare state regime typologies to explain international differences in the size of mortality inequalities.

Changing welfare state regime approaches: opportunities and challenges for studying health inequalities

Theoretically, ideal, or classical welfare state regime classifications provide a good opportunity to group and define countries according to major components of social policies and welfare systems, such as the state's role in ensuring social security and social equity (Esping-Andersen, 1990, 1996; Bambra, 2007). It has also been assumed that the peculiarities of these welfare systems are also associated with population health and health equity outcomes (Eikemo and Bambra, 2008; Bambra, 2011). The original classification developed by Esping-Andersen in 1990 distinguishes three main welfare state regimes: conservative, liberal, and social-democratic. The three regime definitions are based on three criteria: 1) decommodification (capacity to ensure adequate living standards without participating in the labour market); 2) social stratification and social inequalities (including policies combating social inequalities); 3) a private–public mix related to the dependence of individuals on societal institutions such as the market, the family, and the state (Esping-Andersen, 1990). In addition, a fourth criterion was introduced, referring to “defamiliasation” (the ability of an individual to ensure adequate living standards autonomously regardless of marital status) (Esping-Andersen, 1999). The growing diversity in social characteristics has also forced the distinction of additional types of welfare state regimes such as Southern (Mediterranean countries), Confucian (Japan and South Korea), and Eastern European regimes (Eikemo & Bambra, 2008).

The ideal/classical welfare system regime typology has important limitations, especially in rapidly changing and increasingly complex socio-economic and political contexts such as globalisation, rapid deindustrialisation, and the transition to high technology-based industries and services. From the 1970s onward, several economic crises occurred in Western welfare states, which led to vanishing boundaries between ideal/classical welfare regimes and increasing cross-country disparities within these regimes. During the last few decades, many countries have been experiencing “welfare state retrenchment”—declines in social transfers and increasing marketisation of welfare services (Levy, 2010). More recent crises, such as the 2008 global financial crisis, also forced many countries to prioritise pro-active and market efficiency policies, potentially leading to increasing social inequalities and marginalising vulnerable groups such as the unemployed (Oesch, 2015). These economic transformations occurred alongside important changes in population composition, such as population ageing, rapid increases in education and employment among females, and decreasing shares of manual workers (Esping-Andersen, 2010). Inevitably, these structural transformations impeded substantial conversions in some welfare state regimes, including declines in the male breadwinner model in Conservative/Bismarckian states (Huber & Stephens, 2015; Esping-Andersen, 2010). However, there is still a need for more comprehensive and dynamic welfare state regime classification, reflecting rapid changes in various social domains such as social security, employment, and changing family institutions (Esping-Andersen, 2002; Eikemo & Bambra, 2008; Beramendi et al., 2015).

Theoretically, welfare state regimes with more robust and pro-equitable social policies and social security should ensure the corresponding advantages in population health, such as lower mortality and higher life expectancy, when compared to those with weaker social support. This assumption is related to the evidence that fully functioning social security mechanisms should effectively tackle the burden of ill health and health inequalities (Lundberg, 2009; Marmot, 2005). However, establishing systematic associations between welfare state regimes and population health outcomes is challenging. First, although certain general characteristics of each welfare regime may still apply to all countries assigned to the regime, there might be notable and even increasing differences related to specific social and health policy mechanisms (Lundberg, 2008). For example, the four Nordic countries (Sweden, Norway, Denmark, and Finland) are quite diverse regarding alcohol control policies (Östergren et al., 2019). At the same time, persistent excess of alcohol harm explains a substantial part of the longevity disadvantage of Finland and Denmark compared to Sweden (Östergren et al., 2019). Second, there might be other forms of social support mechanisms, such as informal or family networks effectively operating beyond (or in addition to) limited formal social support mechanisms. Despite their fragmented social welfare systems, the recent longevity leadership and lower mortality inequalities in Spain and Italy are illustrative examples showing unexpected associations between the ideal/classical regimes and population health outcomes (Mackenbach, 2017). Third, direct associations between welfare state-specific mechanisms such as social policies and health inequalities can only be identified in at least the partial presence of causal effects—i.e., when socio-economic status predetermines health outcomes such as mortality or longevity and not vice versa. According to this assumption, the welfare state regime may effectively reduce mortality inequalities via a wide range of measures, such as increasing education in the lowest SES groups, reducing income inequalities, and other pro-equity measures (ALLEA, FEAM, 2018).

On the contrary, welfare state interventions using pro-equitable social policies may have any or minimal effects for reducing mortality inequalities if these inequalities are fully or largely attributable to health selection or reverse causation (i.e., health influences socio-economic status) (ALLEA, FEAM, 2018). Health or mortality selection might be an important determinant in contexts such as Nordic countries (social-democratic regimes), maintaining robust social welfare systems and relatively high mortality inequalities (Huijts, Eikemo, 2009). Presumably, the importance of selection effects might have also been increasing over time due to shrinking proportions of lower SES groups, making them increasingly smaller and more disadvantaged in terms of their composition with larger proportions suffering ill-health and other problems such as lower cognitive abilities (Mackenbach, 2017).

Although the ideal/classical welfare state regime concept provides a good starting point to categorise countries according to the core features of their social systems, its direct application for explaining international differences in population health outcomes (including inequalities) is problematic. Increasingly complex mechanisms and pathways between social determinants and health inequalities require a more dynamic concept, taking into account a wider range of formal and informal social support mechanisms, including modern gender equality-oriented family policies (Bambra, 2011). At the same time, substantial compositional shifts in population structures call for new ways to address social and health selection effects, which may be at least partially responsible for sizeable mortality inequalities in countries with already strong pro-equitable social policies.

Methodology and research approach

This chapter also tests the validity of associations between the magnitude of mortality inequalities and classical welfare state regimes. The observations from this review, including the most recent evidence for the period before and during the COVID-19 pandemic and recommendations for further methodological work, might be useful for developing dynamic approaches to provide more comprehensive welfare state classifications suitable for public health research.

This chapter is primarily based on an overview of international and national studies using aggregated mortality measures comparable across countries, such as life expectancy. Life expectancy after a certain age refers to a length of life (in years) based on the assumption that a hypothetical life table cohort will be exposed to the observed age-specific death rates at a given year or period (Preston, Heuveline, Guillot, 2001). The studies included in this review also use other aggregated mortality measures, such as age-standardised death rates, taking into account differences in age composition. The assessment of the magnitude of mortality inequalities by SES relies on a) conventional range-type measurements comparing the worst- and best-performing groups; and b) more advanced (Gini-type or regression-based) measurements accounting for mortality across all SES groups. Absolute measures consider the difference in mortality outcomes (e.g., absolute difference in standardised death rates) between SES groups and refers to excess deaths (per 1000 or 100 thousand population) due to inequality. Relative measures (mortality rate ratio–MRR) show how often mortality is higher in the group under consideration if compared to the reference (best-performing) group. Both absolute and relative measures are important for the assessment of inequality. The review employs education as a principal and most internationally comparable dimension of socio-economic status. In order to avoid errors due to the high probability of changes in education (or other characteristics such as occupation) at younger ages, a lower age limit (e.g., 25 or 30) is usually applied.

Country-specific national life expectancy and mortality inequality measures are further classified and compared according to a modified typology of welfare state regimes adapted from Eikemo and Bambra (2008) (Table 1). It should be noted that some countries can be assigned to different regime types (depending on the author), or their regime may have changed over time (e.g., Switzerland).

Table 1. Adapted welfare state regime typology based on Eikemo and Bambra (2008)

Welfare regime type	Short description	Assigned countries
Liberal	High commodification (dependence on market), minimal welfare transfers, and low redistributions of incomes.	UK[a], USA, Australia[a], Ireland, Canada, New Zealand[a]
Conservative/Bismarckian	Dominant role of employment- and labour market participation-related social policies and transfers. Importance of family policies.	Germany, Austria, France, Belgium, Switzerland[b], Netherlands[c]
Social democratic	Universalism-based approach ensuring equally accessible and adequate social support and income protection for everyone.	Nordic countries
Southern (Mediterranean)	Low coverage and low volume welfare systems and important role of the family and other informal support.	Spain, Italy[d], Portugal, Greece
Confucian	High commodification, low state interventions, and important role of familial support in case of emergency.	Japan, South Korea, Taiwan, Singapore
Eastern European	Recently established regimes in transition. In many cases, include elements or mixtures of different regimes such as conservative Bismarckian and liberal regimes (Cerami, 2010).	Former communist countries of Central and Eastern Europe

[a]also assigned to the Radical or Targeted type with various redistribution mechanisms (Bergqvist et al., 2013); [b]assigned to the Liberal regime in the past; [c]not fully complying to the main principles; [d] sometimes classified as Conservative/Bismarkian.

Human longevity across modern social welfare states

Country-specific male and female life expectancies at birth and age 65 in Figure 1 show important differences across and within types of welfare state regimes. As for male life expectancy at birth, the leading longevity group is comprised of Switzerland, Japan, Sweden, and Australia, followed by Italy and Spain. In the case of females, Japan is a clear vanguard, followed by the group including France, Spain, Switzerland, Australia, and Italy. For both males and females, the laggard longevity group includes Eastern European countries and (since the beginning of the 2010s) the USA. The longevity diversity is particularly pronounced among females at age 65. Once again, Japan maintains clear leadership with a pronounced advantage against the second-best performers, such as France and Spain (Figure 1B). Interestingly, none of the social-democratic Nordic countries belong to the leading group in female life expectancy. On the contrary, the two leading Nordic countries, Sweden and Norway, have been deviating from longevity leadership.

Figure 1 also demonstrates high variability in life expectancy within each type of welfare state regime. Despite many similarities in social welfare policies, Nordic countries show a clear and persisting longevity disadvantage of Denmark and Finland (males only) compared to Sweden and Norway. In the same way, there is a considerable longevity gap between the USA and Australia, both assigned to the liberal welfare regime. There is also a visible long-term disadvantage of female life expectancy in Germany against other Conservative/Bismarckian welfare states; namely, France and Switzerland. Meanwhile, the two Southern regime states, Spain and Italy, show much more comparable trends (Figure 1).

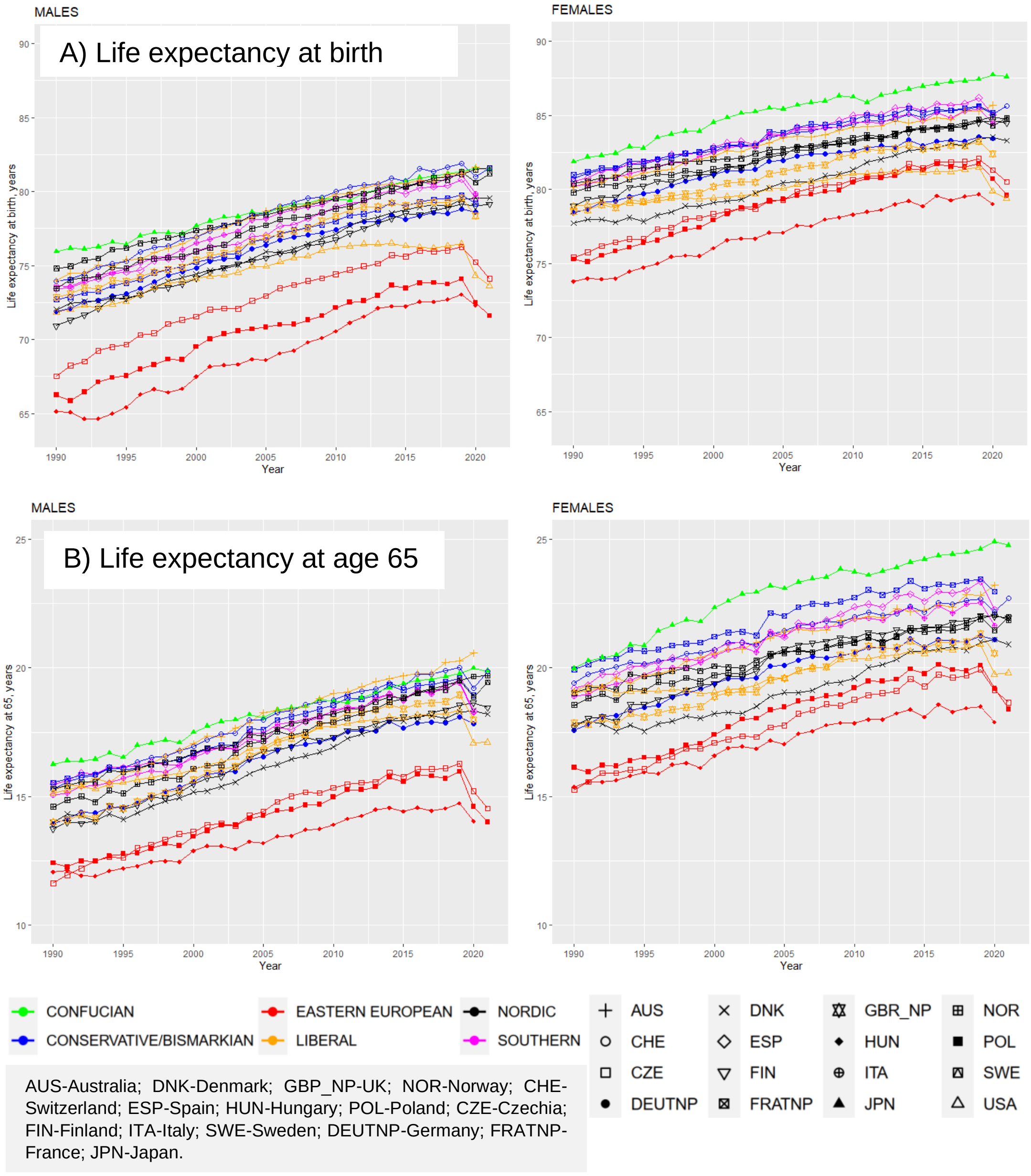
The final observation concerns life expectancy trends during the COVID-19 pandemic. Figure 1 shows that the biggest longevity losses during the pandemic occurred in the countries assigned to the Eastern European, Southern, and Liberal (except Australia) regimes. Meanwhile, Nordic and Conservative/Bismarckian states experienced less pronounced longevity losses (perhaps excepting Swiss males). These observations concur with more advanced studies comparing observed and expected (assuming a no pandemic scenario) life expectancy (Islam et al., 2021).

Life expectancy and mortality differences by education before the COVID-19 pandemic

National average life expectancies hide disparities between SES groups. Numerous studies have confirmed a fundamental relationship that lower SES groups, such as individuals with lower education, low incomes, unemployed individuals, or people involved in manual occupation, have higher mortality and lower life expectancy than those in higher SES groups (ALLEA, FEAM, 2018). However, the magnitude of inequalities tends to differ across countries and regions. It has been shown that international patterns of mortality inequalities may be unexpected. For example, Nordic countries with strong pro-equitable policies and social security have had relatively large mortality inequalities.

On the contrary, some Southern European countries such as Spain and Italy—which presumably have much weaker social welfare regimes and social security—show the largest overall gains in longevity and the smallest mortality inequalities. These controversies have been called the “Nordic paradox” and the “Southern miracle” (Mackenbach, 2017). On the other hand, Eastern European countries show notable longevity disadvantages compared to Western countries and the largest mortality inequalities (the “Eastern disaster”). Finally, countries assigned to the liberal welfare regime, such as the United Kingdom and the United States, have recently experienced a period of stagnation or even a decrease in overall life expectancy (Ho and Hendi, 2018). However, the USA seems to be much more affected by the widening of inequalities due to the spread of “deaths of despair” and “epidemics of midlife mortality,” primarily affecting lower socio-economic groups (Woolf et al., 2018).

Figure 1. Life expectancy at birth (A) and at age 65 (B) in selected countries of different welfare state regimes, 1990–2021 (or the latest year).

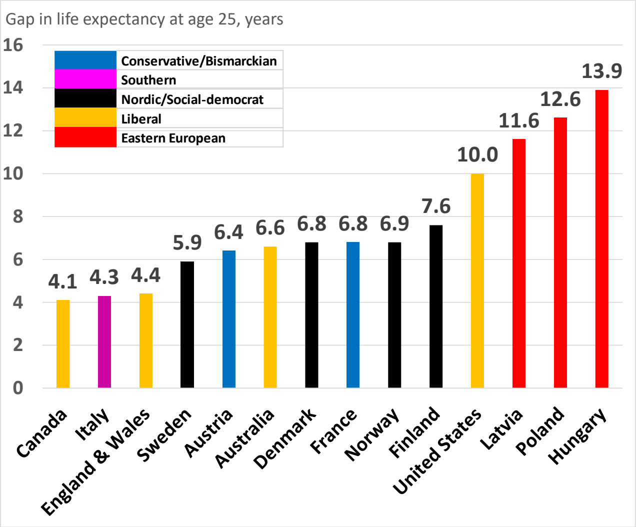


AUS-Australia; DNK-Denmark; GBP_NP-UK; NOR-Norway; CHE-Switzerland; ESP-Spain; HUN-Hungary; POL-Poland; CZE-Czechia; FIN-Finland; ITA-Italy; SWE-Sweden; DEUTNP-Germany; FRATNP-France; JPN-Japan.

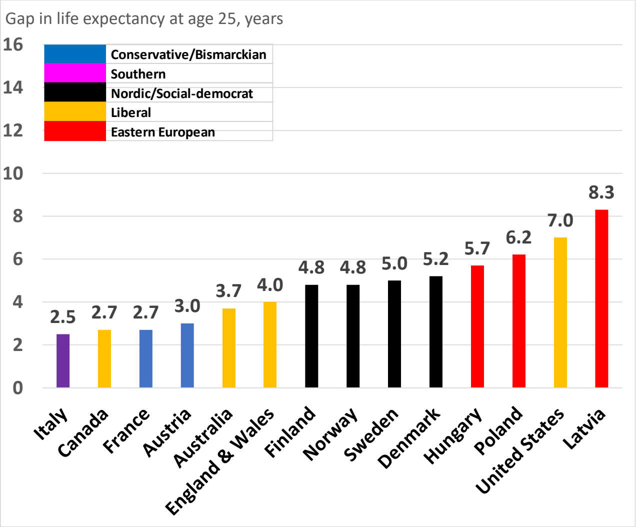
Source: Human Mortality Database (www.mortality.org), 2023.

Figure 2. Gap in life expectancy between the highest and lowest educated males and females at age 25 around 2011.

A) MALES



B) FEMALES



Source: Murtin, Mackenbach, Jasilionis, d'Ercole, 2021.

Figure 2 shows the magnitude of differences in male and female life expectancy at age 25 across the selected OECD countries around 2011. Strikingly, the smallest life expectancy gaps (less than five years) can be observed in Italy (Southern welfare regime), Canada, and the UK (Liberal welfare regimes). Meanwhile, this comparison confirms the "Nordic paradox", as Sweden, Norway, and Denmark show an average longevity gap, and Finland is even above average (Figure 2A). The biggest gap can be observed in the USA and Eastern Europe. The two Conservative/Bismarckian states (Austria and France) and Australia belong to the average category. The educational gap pattern is different among females (Figure 2B). In this case, the smallest longevity gap is observed in Italy (Southern regime), followed by Canada (Liberal regime), France and Austria (Conservative/Bismarckian regime), and Australia and the UK (both Liberal regimes). Once again, the highest inequality refers to Eastern European countries and the USA (Liberal regime). All four Nordic countries perform worse than expected and show only an average position between the countries mentioned above (Figure 2B).

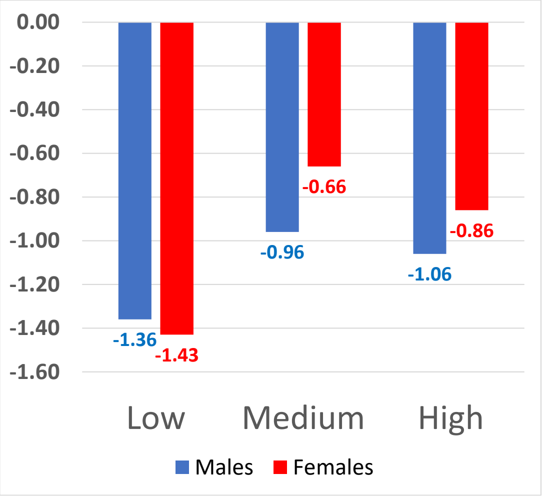
Monitoring temporal changes in life expectancy and mortality inequalities between different SES groups remains challenging. The difficulties relate to the need for more coherent register-based or census-linked mortality data covering more prolonged periods. Except for Nordic countries' long histories of electronic registers allowing them to establish the SES of the deceased and surviving populations, other countries still rely on census linkages or specific longitudinal studies. This evidence can be produced only for specific periods and with significant delays after census points. Existing scarce international evidence based on data from relatively few European high-income countries indicates that there might be some signs that absolute mortality inequalities are narrowing. For example, an international comparison by Mackenbach et al. (2016) concluded that between 1990–1994 and 2005–2009, absolute differences in mortality between the lowest- and highest educated people aged 35–80 years tend to narrow in Sweden, Scotland, England and Wales, Switzerland, and Spain (Barcelona), whereas no substantial progress (or even a contrary trend among females) was observed in Finland and Norway. These positive trends seemed to continue until 2015 (Mackenbach et al., 2019). However, several studies covering the entire age range above 30 warn about the widening life expectancy gaps in education in Nordic countries and growing disparities at old ages (Steingrímsdóttir et al., 2012; Németh et al., 2021; Enroth et al., 2022). The worrying trend of widening socio-economic inequalities in longevity in old age has also been observed in some other countries, including among Italian males and German pensioners (Zazueta-Borboa et al., 2023; Wenau, Grigoriev, Shkolnikov, 2018).

Contrary to diverse changes in absolute mortality inequalities, relative mortality inequalities tend to increase in most cases. However, this trend can be partially explained by the artefact of decreasing absolute mortality levels—i.e., relative inequalities tend to be larger at lower absolute levels of mortality (Mackenbach, 2017). In addition, increases in absolute and relative mortality and life expectancy inequalities can also be attributable to substantial changes in population composition by SES (e.g., education), such as rapid decreases in the size of lower SES groups. For example, one of the explanations for the growing longevity gaps in Nordic countries suggests the important role of health selection related to the selection of unhealthy individuals into increasingly smaller and marginalised lower SES groups (Lundberg, 2008).

Mortality differences by SES during the COVID-19 pandemic

Prior research suggests that crises and disasters may disproportionally affect the lowest SES groups and lead to substantial growth in mortality inequalities. For example, huge mortality increases in Estonia and Lithuania during the economic crises of the 1990s were accompanied by a subsequent jump in mortality inequalities by education (Leinsalu et al., 1999). During the COVID-19 pandemic, most European countries experienced pronounced loss of life expectancy due to excess deaths due to the coronavirus and other indirect factors (Islam et al., 2021). To the date of the review, only a few country-specific studies have published data on changes in group-specific mortality and life expectancy during the pandemic period. One of the most comprehensive findings comes from Spain, which was particularly hard-hit during the first year of the pandemic (Spijker, Trias-Llimós, 2023). The study shows that life expectancy losses were the highest among the least educated, whereas (surprisingly) the smallest decrease was observed among medium-educated males and females (Figure 3). Further comprehensive multiple cause-of-death analyses suggest that most observed life expectancy declines in Spain occurred due to a) increases in mortality after the age of 65 years and b) the impact of COVID-19 (occurring as an underlying or contributory cause of death) (Spijker, Trias-Llimós, 2023). The authors conclude that the COVID-19 pandemic led to increases in longevity inequalities, especially for females.

Figure 3. Losses in male and female life expectancy at age 30 by educational category. Spain, 2018–2020.



Source: Spijker, Trias-Llimós, 2023.

Drefahl et al. (2020) confirm pronounced excess mortality due to COVID-19 and other causes of death among those with lower education, low income, and immigrants from low- or middleincome countries in Sweden in 2020. The UK studies also confirmed the increased risk of dying from COVID-19 among ethnic minority groups such as Bangladeshi, Pakistani, Black African, and Black Caribbean, i.e., the same groups showing the lowest vaccination rates. (Bosworth et al., 2022). Many other studies have examined the social patterning of COVID-19–related mortality without examining the impact of the pandemic on the changes in mortality inequalities based on individual SES characteristics. For example, many studies focused on monitoring excess mortality in socio-economically deprived areas. An international review by McGowan and Bambra (2022) concluded that deprived or socio-economically disadvantaged areas systematically show higher COVID-19 mortality rates. According to the ONS estimates for July 2020, excess mortality involving COVID-19 was about two times higher in the most deprived areas than in the least deprived areas. Several authors warn about the threat of further amplifying health and mortality inequalities during the post-pandemic period (Marmot, Allen, 2020). This threat is realistic, considering the unfavourable situation before the pandemic and the unequal economic, social, and health consequences following the pandemic across socio-economic groups (McGowan, Bambra, 2022).

Suicide mortality differences by SES

Suicide is a recognised precise indicator of mental health, reflecting the effectiveness of prevention and mental healthcare (Naghavi et al., 2019). High suicide rates may indicate unfavourable socioeconomic and cultural contextual factors, such as unemployment, general attitudes regarding suicide, or prevailing masculinity culture (Alston, 2012; Jasilionis et al., 2020). It has been shown that residing in areas with a higher prevalence of socioeconomic deprivation and low education tends to increase suicide risk, independently from individual socioeconomic characteristics (Jasilionis et al., 2020). At the individual level, lower socioeconomic status and poor material circumstances may be directly associated with an increased risk of suicide due to childhood adversities, lower ability to cope with stress, and poorer access to mental healthcare (Galobardes et al., 2006; Turecki, Brent, 2016). Individuals with low SES tend to have poorer control over their lives and feelings of fatalism, leading to mental health problems and suicide (Grover et al., 2009).

Studies report notable differences in suicide rates between and within countries (Lorant et al., 2018; Mäki, Martikainen, 2007, 2012; Naghavi et al., 2019). In recent decades, the highest suicide rates have been observed in the countries of the former USSR, such as the three Baltic countries—Russia, Belarus, and Ukraine (Värnik, Wasserman, 2016; Jasilionis et al., 2020). In the region, the suicide epidemic mainly concerns adult males at working ages and lower SES groups (Leinsalu et al., 2020). Lorent et al.'s (2018) report on persisting or even increasing male suicide differentials by education in 15 European populations aged 35–79 between the early 1990s and early 2000s (Lorant et al., 2018). The highest absolute and relative mortality excess of lower-educated males in 2001–2005 was observed in Poland, Hungary, Estonia, and Lithuania (suicide rates were 3–5 times higher than in the highest education group (Lorent et al., 2018). Absolute suicide rate differentials between lower and higher-educated males were the smallest in the two Southern populations (Italy and Spain), the two Nordic countries (Denmark and Norway), and in England and Wales (Liberal welfare states). Finland and the selected Conservative-Bismarkian countries (Switzerland, Belgium, and Austria) showed moderate absolute inequalities (Lorent et al., 2018). The same study suggests that the overall suicide mortality and educational inequalities were much smaller among females. A study by Leinsalu et al. (2020), covering a more recent period from the early 2000s to the early 2010s, reports declining absolute educational inequalities among males aged 30–64 in the three Baltic countries and in Finland. However, despite progress in reducing overall and education-specific suicide rates, Latvia and Lithuania still maintained 2–3 times higher levels of absolute inequality (as reflected by the SII measure) than Finland (Leinsalu et al., 2020). At the same time, the opposite trend—widening inequality in suicide—was observed in the USA (Phillips, Hempstead, 2017).

Unfortunately, to our knowledge, currently available evidence on suicide differentials by education or other SES characteristics does not cover the most recent period, including the COVID-19 pandemic. However, scarce findings indicate that the pandemic had an important impact on mental health, disproportionally affecting individuals in low-income groups, the unemployed, and ethnic minorities, in some countries (Pathirathna et al., 2022).

Conclusions and recommendations

The classical welfare state regime concept provides a comprehensive starting basis to classify countries according to the key principles of formal social policies and provisions. However, classical typology must account for rapidly changing socio-economic contexts and population structures. More objective assessment and classification considering modern realities must be based on the incorporation of additional specific criteria, such as informal social support mechanisms and modern family policies (Esping-Andersen, 2002; Eikemo and Bambra, 2008; Beramendi et al., 2015). This review confirms evidence suggesting controversial associations between ideal welfare state regimes and population health outcomes, including inequalities in health and mortality. However, these controversies, such as the "Nordic paradox," are probably related to inadequacies in classical welfare regime typology and issues related to the measurement of mortality inequalities. Recently published reports exploring the causal effects of SES on health highlight uncertainties related to establishing determinants of health inequalities (ALLEA, FEAM, 2018; 2021). One may assume that in the absence of solid evidence of such relationships, strengthening social welfare provisions and social policies intended to reduce inequalities might be unjustified. Nevertheless, persisting pronounced mortality inequalities and systematically high excess mortality in vulnerable groups with low education and other SES characteristics highlight the need for continuous monitoring and policy enhancements. Large or moderate absolute suicide disadvantage of less educated males in Eastern Europe, Finland, and some Conservative/Bismarckian countries is a matter of concern, because it points to inadequate and unequal progress in prevention.

In particular, important compositional shifts in population structures call for new ways to address social and health selection effects, which may be at least partially responsible for sizeable mortality inequalities in countries with already strong pro-equitable social policies. Finally, scarce evidence about the disproportional effects of COVID-19 on mortality in the most disadvantaged population groups, together with warnings about the threat of further widening of inequalities, indicate an urgent need to close evidence gaps and continue policy efforts—regardless of the lack of consensus regarding the causality of relationships between SES and population health.

The following five methodological recommendations can be proposed in the area of strengthening evidence about mortality inequalities and their determinants:

1. Continue efforts to produce timely, reliable, and internationally comparable data on mortality inequalities by SES for more countries beyond the relatively few high-income countries.
2. Because longevity progress at the modern stage of epidemiological development depends on health improvements at increasingly advanced ages, more efforts are needed to fill in frequently missing or incorrect information about SES and mortality differentials at old ages.
3. Clear and easily interpretable guidelines are still needed to produce uniform approaches to measuring and monitoring international trends and differences in absolute and relative mortality inequalities.
4. As suggested in the recent ALLEA/FEAM reports (ALLEA, FEAM, 2018; 2021), additional interdisciplinary research and methodological innovations are needed to provide solid grounds for consensus about the possible determinants of inequalities.
5. International studies establishing associations between welfare state regimes and population health outcomes must rely on more advanced regime classifications based

on more precise analyses of specific social and health policy mechanisms, and incorporating more dimensions such as informal support networks and family policy specifics.

The following four recommendations can be proposed to strengthen policies addressing mortality inequalities:

1. Policy efforts addressing social determinants of health inequalities must be continued, despite fragmented evidence about the causality of relationships between SES and population health outcomes.
2. Emerging evidence and/or assumptions about reverse causation (health selection) due to decreasing shares of the most vulnerable and disadvantaged groups should not be used as an excuse for inaction.
3. The policies should move forward, considering best practices in reducing the burden of health inequalities, irrespective of ideological differences in general policies and prevailing welfare state regime contexts.
4. Lessons from the COVID-19 pandemic and post-pandemic threats related to unequal socio-economic and health consequences should be taken into account, as they pose threats to sustainable and equitable health progress in the near future.
5. International and national policies should prioritise socioeconomic inequalities in mental health and excess suicide in vulnerable groups.

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2. New Forms of Inequality

2. New Forms of Inequality

2.1 COVID-19 Pandemic and its impact on healthcare professionals, with a specific focus on training programs and the mental health of medical residents in Romania

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Executive summary

This section covers the impact of COVID-19 on healthcare professionals, with a specific focus on the impact on training and mental health of resident physicians as a particularly vulnerable group.

We have focused on analysing the effect of SARS-CoV-2 infection and vaccination, and working in an environment with high exposure to the infection on healthcare professionals (HCP) or HCP in training, as vulnerable groups. Our results showed that it is crucial for risk mitigation strategies to prioritise the assessment of psycho-social impacts, in order to identify vulnerabilities and tailor interventions to effectively address the distinct requirements of different vulnerable groups.

Introduction

During an emergency situation in a healthcare system, the most important actions are the rapid and effective identification of pathogens and epidemiological surveillance. Nevertheless, the three years of the COVID-19 pandemic demonstrated that it is crucial for risk mitigation strategies to prioritise the assessment of psycho-social impacts, identify vulnerabilities, and tailor interventions to effectively address the distinct requirements of different vulnerable groups. The COVID-19 pandemic triggered an unprecedented flow of public health measures aimed at preventing or limiting viral transmission in the community, rapid tracing, identification and isolation of contacts, and protecting the most vulnerable populations. Mathematical modelling of many epidemiological and social parameters were important pieces in complicated policymaking scenarios, as they sometimes furnished reliable predictions on the shape, amplitude, and severity of the pandemic. These parameters were adapted each time a new variant of concern was identified (Diaconu et al., 2023) and were used to back up reinforcements or relax of some of the most drastic public health measures, such as lockdowns, border control, closing workplaces and schools, social distancing, mobility restrictions, and obligatory Green Passes. For example, accumulating genomic information on the spread of the highly transmissible—yet less pathogenic—Omicron variant, triggered a progressive abandon of the "zero COVID" policy with compulsory curfews, testing, and strict mobility control initially adopted by a series of Eastern-Asian countries (Cai et al., 2022; Diaconu et al., 2023). Consequently, obtaining direct evidence and efficient communication worldwide were game changers in shaping and adapting policies that initially were highly exaggerated, and not appropriately adapted to protect of vulnerable groups and increased inequalities and the psycho-social impacts of COVID-19 in particularly vulnerable groups of people.

In this report, we have focused on analysing the effects of SARS-CoV-2 infection and vaccination, or of working in an environment with high exposure to the infection (Chivu-Economescu et al., 2022a, 2022b; Matei et al., 2023) on the immunity or mental health of healthcare personnel (HCP) or HCP in training (Constantinescu et al., 2022), as vulnerable groups.

The effect of SARS-CoV-2 infection and vaccination, or working in an environment with high exposure to the infection on HCP—impact on public health decisions

HCP, who are at the forefront of patient care, qualify as a vulnerable group as they are overwhelmingly exposed to infection compared to the general population[9]. In spite of the fact that personal protective equipment (PPE) has been commonly implemented to minimise viral transmission, healthcare personnel have still been disproportionately exposed to SARS-CoV-2 due to insufficient training and compliance, discomfort with prolonged PPE use, and the extended duration of the pandemic, which resulted in increased exhaustion and challenges in maintaining consistent PPE adherence (FEAM, 2020; 2021; George et al., 2023).

Data obtained on the kinetics and persistence of humoral and cellular immune responses to natural infection and vaccinations in HCP were very important in making additional public health decisions related to the need for an extended vaccination regimen (Chivu-Economescu et al., 2022a; 2022b; Matei et al., 2023). Our studies at six months, and one and two years after vaccination showed a consistent and constant decrease in the level of anti-S/RBD antibodies, even in persons who received a booster dose eight months after completion of the initial regimen.

A significant neutralising capacity against the wildtype and Omicron variant was maintained at least three months after a booster dose, and the number of breakthrough infections in HCP were limited; probably reflecting a continuous antigenic stimulation following frequent exposures in their professional setting. There were no significant differences between anti-

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[9] See: https://www.euractiv.com/section/health-consumers/news/healthworkers-mental-well-being-needs-more-attention-meps-say/ and WHO, 2020.

S/RBD IgG levels in subjects with and without breakthrough infections, suggesting that frequent vaccine boosting might not be the most appropriate action in immunocompetent persons (Chivu-Economescu et al., 2022a, 2022b; Matei et al., 2023). Consequently, in Romania, immunocompromised persons had higher priority for boosters, and specific recommendations were adapted based on this evidence while, at the end of 2020, HCP had the highest priority for the first dose of anti-COVID-19 vaccines[10].

After evidence review and deliberations, WHO's Strategic Advisory Group of Experts (SAGE) Working Group on COVID-19 Vaccines and SAGE members, including Regional Immunisation Technical Advisory Group chairs, issued a major revision of the "WHO SAGE roadmap for prioritising uses of COVID-19 vaccines" in August 2022[11] that recommend booster administration place higher priority on older populations and immunocompromised persons and listed frontline healthcare workers in fifth place, still in the high priority-use group. However, WHO currently acknowledges the breadth, magnitude, and durability of humoral and cell-mediated immune responses to variants and the need and timing of regular booster doses, as current knowledge gaps that should be covered by further research[12].

Impact of COVID-19 pandemic on the training and mental health of young HCP in training

HCP in training, particularly resident doctors, have been identified as a specific group with higher vulnerability compared to the general population, as evidenced by pre-pandemic studies (Dyrbye et al., 2014). Training periods appears to be the topmost career stage for distress and burnout among physicians, and medical residents were significantly more affected by depression symptoms than the population control samples, even without additional pressure caused by the pandemic (Dyrbye et al., 2014). However, the sudden change in the educational system during COVID-19 pandemic has had a significant impact on the younger generation in general, as highlighted by compelling evidence (Dubey et al., 2020). The lockdown, with the absence of social and physical contact between students and between students and teachers generated by online courses, have not only led to an increase in stress levels, but also to a decrease in interest in learning and a reduction in the level of accumulated knowledge on the learning process (Dubey et al., 2020). The circumstances imposed by these

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[10] See: Romanian Government, MONITORUL OFICIAL no. 1171, 3 December 2020, https://legislatie.just.ro/Public/DetaliiDocumentAfis/234095.

[11] See: (https://www.who.int/publications/i/item/WHO-2019-nCoV-Vaccines-SAGE-Roadmap).

[12] See: "Good practice statement on the use of second booster doses for COVID-19 vaccines", https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE-good-practice-statement-second-booster).

epidemiological conditions have resulted in young physicians in training being deprived of the opportunity to perform certain interventional procedures. This can be attributed to several factors, including the reduction in the number of elective procedures and the implementation of additional protective measures. Strict infection control protocols, and limitations on the number of personnel present in healthcare settings, has further impacted the ability of young physicians to engage in interventional manoeuvres. These measures, while essential in mitigating the spread of the virus and safeguarding the health of everyone involved, have inevitably created barriers to hands-on training experiences and a dramatically negative influence on the learning process of resident doctors.

Our study on the COVID-19 Pandemic and its Impact on Training Programmes of Medical Residency in Romania (Constantinescu et al., 2022) evaluated the impact of the COVID-19 pandemic on professional training and the subjective perception of stress, anxiety, and depression among resident doctors specialising in gastroenterology in Romania. Resident doctors, particularly those in specialisations that were very exposed to COVID-19 due to the interventional type of practical skills they need to acquire, were possibly much more affected both mentally and professionally.

According to pre-existing data, the COVID-19 pandemic caused an increase in stress, anxiety, and depression among HCP (Lai et al., 2020; Palchaudhuri et al., 2020). Supporting this concept is a study carried out in China, the country where the COVID-19 pandemic originated, involving a sample size of 1257 healthcare workers. A total of 50.4% of participants reported symptoms of depression, 44.6% reported anxiety, 34% insomnia, and 71.5% reported feeling a sense of danger (Lai et al., 2020).

As an example, the training curriculum for resident doctors specialising in gastroenterology in Romania, extends over a period of five years. During this period, resident doctors must complete eight modules: gastroenterology, endoscopy, general surgery, internal medicine, imaging, emergency medicine, anaesthesia and intensive care, and bioethics. The specialisation is intended to acquire knowledge and practical skills to meet European standards, to allow graduate physicians to be able to autonomously practise gastroenterology and hepatology without supervision, without eliminating consultation with colleagues and teamwork. Training takes place in university hospitals.

The entire curriculum has undergone significant changes during COVID-19 pandemic. The pandemic has disrupted training and educational opportunities for HCP in general. Many conferences, workshops, and in-person training sessions have been cancelled or moved online, impacting professional development and continuous medical education. At the same time, the number of patients who presented to the hospital for treatment of non-infectious diseases was reduced, as was the number of interventional procedures performed under supervision by resident physicians (Cravero et al., 2020; Balhareth et al., 2020). Resident physicians have experienced increased workloads and longer working hours due to the surge in COVID-19 cases. This has led to physical and emotional exhaustion, contributing to burnout or at least an increase in their level of stress (Cravero et al., 2020; Gallagher et al., 2020). In Romania, the large number of patients infected with SARS-CoV-2 required the deployment of a significant number of resident physicians to COVID-19 support hospitals, and their direct involvement in the diagnostic and therapeutic management of patients with different profiles than the specialty in which the physicians were training (Potts, 2020). The interventional aspects of some specialties impose the need for resident doctors to learn complex practical skills in addition to theoretical knowledge (Huang et al., 2020). For example, Spier et al. showed that mastering the ability to perform a complete colonoscopy requires an average of 500 colonoscopies during a residency period in gastroenterology (Spier et al., 2010). Under these conditions, the reduction in the number of hospitalisations and, implicitly, of the number of interventional procedures, led to a greater negative impact on gastroenterologists' professional training, compared to resident doctors in other medical specialties.

Another profound effect of the COVID-19 pandemic was the high rate of infection among HCP in general, consequently generating negative effects on mental health. Jeremias et al. reported that approximately 11% of COVID-19 cases had been diagnosed in healthcare workers (Jeremias et al., 2020).

Healthcare personnel are at higher risk of contracting COVID-19 due to their direct contact with infected patients. Despite implementing preventive measures, such as PPE and infection control protocols, healthcare workers are exposed to the virus and have experienced higher rates of infection compared to the general population, likely due to prolonged exposure to a high viral load.

Considering the absence of studies to specifically evaluate the impact of COVID-19 pandemic among gastroenterologists, our main objective was to detect the particularities of the training in gastroenterology on resident physicians and the COVID-19 pandemic's impact on professional training and on the subjective perception of stress, anxiety, and depression among resident physicians in the field of gastroenterology.

We also made an assessment of the need to interrupt the residency programme due to the COVID-19 pandemic, as well as its impact on the level of professional training; evaluated the rate of SARS-CoV-2 infection among gastroenterologists living in Romania; and examined the relationship between the profile of the hospital and the number of patients hospitalised daily, as well as the number of procedures performed daily by the resident doctor under supervision. Moreover, we investigated possible correlations between the hospital profile and the percentage of resident doctors infected with the SARS-CoV-2 virus, or between the number of infected resident physicians and the number of those who reported the onset of a depressive disorder.

Our research evaluated the consequences of COVID-19 pandemic on professional training and stress, anxiety, and depression among gastroenterology residents after approximately one year after the onset of the pandemic in Romania.
We conducted an observational cross-sectional study based on a questionnaire completed by 180 resident physicians specialising in gastroenterology in Romania. The demographic analysis of the subjects included in the study showed a predominance of females (61.7% versus 38.3%), in the age group 28–30 years (61.7%), and of the doctors who worked in emergency hospitals (56.7% non–COVID-19 emergency hospitals; 21.7% COVID-19 emergency hospitals). Considering five years of professional training, the distribution was relatively uniform.

More details on the study design and procedures are described in the article published in 2022 by Constantinescu G. et al. with the support of the PERISCOPE project (Constantinescu et al., 2022).

Assessing the perception of the impact of the COVID-19 pandemic on the level of professional training of resident gastroenterologists, we found that about 82% of subjects stated that they felt less well-prepared professionally about one year after the onset of the COVID-19 pandemic, compared to the previous period. The training curriculum of a medical resident in gastroenterology in Romania includes some mandatory modules like endoscopy and general surgery and requires the accumulation of practical skills beyond theoretical ones.

Under these conditions, the reduction of the contact between resident physicians and patients and, respectively, the reduction of the number of diagnostic and interventional procedures performed by them because of the measures imposed by COVID-19 pandemic, led to an important negative impact on their professional training. Other studies on young physicians have shown similar results. For example, a study that included 183 physicians—123 of whom were gastroenterologists in training—reported a significantly negative impact of the COVID-19 pandemic on the professional activities of young gastroenterologists. They reported a reduction in the number of endoscopic procedures during the COVID-19 pandemic of up to 91% compared to the pre-pandemic period (Marasco et al., 2020). In another study, Huntley et al. reported a 67% decrease in surgical experience during the COVID-19 pandemic among maxillofacial surgery resident surgeons, 88.8% of whom reported a negative impairment of professional activity (Huntley et al., 2020). Analysing the results that we obtained, and the data from the literature, we can say that the COVID-19 pandemic had a negative impact on the professional training of young doctors, regardless of their medical specialty.

Assessed separately, increased levels of stress, anxiety, and depression were reported by 80% of participants in our study. Ong showed an increased risk of burnout among gastroenterologists during the COVID-19 pandemic (Ong, 2020). Another study highlights the need to implement measures to reduce the level of stress induced by the COVID-19 pandemic among resident physicians (Marasco et al., 2020). The main stressor factor in this study for young gastroenterologists was the fear of SARS-CoV-2 infection. Tsamakis et al. reported on stressors that affected medical staff during the COVID-19 pandemic, including interruption of basic practice, feelings of loss of control, and fear of the disorganisation of the medical system (Tsamakis et al., 2020). Our study showed an increase in stress levels among medical staff during the COVID-19 pandemic. Among the reasons that could lead to the negative effect on professional training is the need to interrupt the residency period because of the transfer/deployment to other health units or even closure of clinical departments for epidemiological reasons related to the pandemic. However, our results showed that only 18.3% of participants had to eventually interrupt their internships. These data are also supported by Marasco et al., who reported a reduction in the number of endoscopic procedures during COVID-19 pandemic. This reduction was explained both by the redistribution of resident physicians specialising in gastroenterology into care centres for patients with COVID-19, and by the risk of spreading SARS-CoV2 during endoscopic procedures. The perception of the negative impact of the COVID-19 pandemic on gastroenterological training was also supported by the reduction of the involvement of resident doctors in certain activities by their mentors (Marasco et al., 2020).

In our study, a significant percentage of resident physicians (41.67%) stated that they were diagnosed with COVID-19 during this period. Of these, 68% associated viral infection with in-hospital activity, and 56% said they were vectors of transmission for the virus among people close to them. 84% of resident physicians reported mild or asymptomatic forms of the disease, and absence from work for a period of 10–14 days. According to these results, SARS-CoV-2 infection has contributed to resident doctors' dissatisfaction with professional training.

Compared to data from the literature, the rate of SARS-CoV-2 infection among gastroenterologists living in Romania was very high (41.7%). For example, in a study of 2306 New York City physicians, 4.4% of doctors reported confirmed cases of COVID-19 (Breazzano et al., 2020). Another study in Saudi Arabia reported a 2.9% rate of SARS-CoV-2 infection among 240 resident physicians (Balhareth et al., 2020).

Our study identified a reduction of the number of hospitalisations during the pandemic period, compared to the pre-pandemic year in the case of all four hospital profiles (non-COVID-19 emergency hospitals, COVID-19 emergency hospitals, non-COVID-19 chronic disease hospitals, COVID-19 chronic disease hospitals).

A direct consequence of the decrease in the number of hospitalisations was the decrease in the average number of endoscopic procedures performed by resident doctors. In these conditions, given that it has been shown that there is a direct proportional correlation between the number of endoscopic procedures performed and the endoscopic abilities of a gastroenterologist (Huang et al., 2020; Spier et al., 2010), we can emphasise the negative impact of the COVID-19 pandemic on the professional training of medical residents in gastroenterology. Cravero et al., who evaluated 1420 resident physicians in various specialties, found a reduction in training activities among 84.6% of respondents. This percentage has increased to 97% among doctors in surgical specialties (Cravero et al., 2020).

In addition, an association between the average number of patients admitted daily to the gastroenterology department and the rate of SARS-CoV-2 infection of the subjects included in our study, was observed. Contrary to expectations, however, the average number of endoscopic procedures performed by resident physicians was not associated with their rate of infection, and COVID-19 diagnosis was not responsible for the increases in stress, anxiety, or depression. A study that included 1102 resident surgeons reported that 55.7% experienced an increase in the level of stress regarding becoming infected with SARS-CoV-2. The same study reported an increase in the level of stress about potentially transmitting COVID-19 to family/friends in 72.7% of physicians (Aziz et al., 2021).

Regarding the perception of resident physicians of the effectiveness of new online learning methods, most of them (88.3%) considered the new methods of continuing medical education less effective. Despite our findings, the study by Iyer et al. reported good acceptance of online teaching methods, due to their greater flexibility (Iyer et al., 2021). Seifman et al., after a careful analysis of the literature, reinforced the perception of the low efficiency of online teaching methods among young doctors, validating our results (Seifman et al., 2021).

The limitations of our study include the small number of respondents and the absence of objective methods for evaluating professional training, as well as the levels of stress, anxiety, and depression among participants. Another limitation of this study is that although it reveals several relationships between the variables, it does not necessarily determine the causality between them, as it was conducted at a single point in time. In addition, personal information regarding participants (e.g., their social life, interaction outside the hospital, safety methods, etc.) was not collected in this study, which might have had an impact on the outcomes of some variables, especially on the rate of infection.

The results of this study may open new avenues for improving learning methods designed for resident physicians. Our study emphasises the necessity of establishing a better protocol to improve the admission of patients to hospitals in crisis conditions. Better access to medical services benefits both patients and young doctors, who are in the process of learning. It is also important for patients to know the problems that young doctors face, to adapt their attitude and reduce the level of stress they exert. The goal is to improve the doctor–patient relationship, with bidirectional benefits.

Conclusions and key messages

The COVID-19 pandemic appears to have had a negative impact on the training, and on the levels of stress, anxiety, and depression among resident doctors specialising in gastroenterology in Romania. Thus, both their clinical activity and their interventional activity may be negatively affected by COVID-19 pandemic.

Online teaching methods might not have the same benefits as physical meetings in congresses and scientific conferences. Thus, it is necessary to implement measures to improve the practical and theoretical learning process among young doctors in order to reduce dissatisfaction with professional training, and to reduce their levels of stress, anxiety, and depression.

Due to the enhanced impact of pandemic on healthcare personnel (high levels of stress, anxiety, and emotional strain due to the demanding and often overwhelming circumstances of caring for COVID-19 patients, witnessing patient suffering, and dealing with limited resources), comprehensive support systems are required, including ones that prioritise residents' mental and physical well-being, provide adequate resources and protection, ensure fair working conditions, and recognise their valuable contributions to public health.

Disclaimer

This report section is based on the scientific papers:

Chivu-Economescu, M., Bleotu, C., Grancea, C., Chiriac, D., Botezatu, A., Iancu, I. V., Pitica, I., Necula, LG., Neagu, A., Matei, L., Dragu, D., Sultana, C., Radu, EL., Nastasie, A., Voicu, O., Ataman, M,. Nedeianu, S., Mambet, C., Diaconu, CC., Ruta, SM. (2022a). "Kinetics and persistence of cellular and humoral immune responses to SARS-CoV-2 vaccine in healthcare workers with or without prior COVID-19", *Journal of Cellular and Molecular Medicine* (Wiley Ed.; ISSN: 1582-4934), Vol. 26, Iss. 4, 1293-1305. https://doi.org/10.1111/jcmm.17186

Chivu-Economescu, M., Vremera, T., Ruta, SM., Grancea, C., Leustean, M., Chiriac, D., David, A., Matei, L., Diaconu, CC., Gatea, A., Ilie, C., Radu, I., Cornienco, AM., Iancu, LS., Cirstoiu, C., Pop, CS., Petru, R., Strambu, V., Malciolu, S., Popescu, CP., Florescu, SA., Rafila, A., Furtunescu, FL., Pistol, A. (2022b). "Assessment of the Humoral Immune Response Following COVID-19 Vaccination in Healthcare Workers: A One Year Longitudinal Study", *Biomedicines*, 28;10(7):1526. https://doi.org/10.3390/biomedicines10071526

Constantinescu, G., Gheorghe, G., Ionescu, VA., Plotogea, O-M., Sandru, V., Diaconu, CC., Varlas, VN., Bacalbasa, N., Diaconu, CC., Stan-Ilie, M. (2022). "COVID-19 Pandemic and its impact on Training Programs of Medical Residency in Romania", *Gastroenterology Insights* (ISSN: 2036-7422), Vol. 13, Iss. 1, 106-116. https://doi.org/10.3390/gastroent13010012

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2.2 The unequal mental health impact of COVID-19 for young and minoritised people in the UK: a case study

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Executive summary

This case study applies an anthropological approach to the mental health consequences of new forms of inequality arising from the COVID-19 pandemic in the United Kingdom (UK). It draws from a series of collaborative workshops as part of the 2023 'Commission for Pandemic Governance and Inequalities', in order to centre the perspectives of younger people and people from racially minoritised communities who sustained significant losses from COVID-19. The research shows how the 'unprecedented' social conditions of the COVID-19 pandemic introduced new dimensions of inequality in the UK, often exacerbating long-standing inequalities already compromised in a context of austerity. As this case study highlights, these inequalities can be experienced and understood in relation to poor mental health, such as the burnout of intensified and unevenly distributed care burdens, the trauma of racism in healthcare settings, and the anxiety of school closures for marginalised students. This has implications for mental health research and resourcing, supporting the role of ethnographic and participatory methods in understanding and addressing mental health inequalities.

Introduction

Various PERISCOPE researchers have highlighted the mental health impacts of the pandemic at various stages, especially for groups who are socioeconomically disadvantaged (Asper et al., 2022; Spiritus-Beerden et al., 2021; Winkler et al., 2021; PERISCOPE, 2021). The COVID-19 pandemic has exacerbated existing inequalities and introduced new ones, with extensive mental health consequences, highlighting the need for accessible care services and economic transformation (Renda & Schaus, 2020). This is deserving of cross-disciplinary research which highlights the economic legacies of the pandemic, and the mental health consequences of related uncertainties; what might be understood as a global COVID-19 'syndemic' (Singer et al., 2021).

This case study applies an anthropological approach to the mental health consequences of new dimensions of inequality arising from the COVID-19 pandemic in the UK. It draws from a series of collaborative workshops to centre the perspectives of younger people and people from minoritised communities who sustained significant losses from COVID-19. These workshops were part of the recent Commission on Pandemic Governance and Inequalities

(PERISCOPE, 2023). This was built from a legacy of the LSE Covid & Care project, which documented how the COVID-19 pandemic exacerbated existing inequalities and created new ones (see Bear et al., 2021). Overall, this research has highlighted the role of COVID-19 and related policy responses in reproducing and worsening inequalities related to race, age, education, occupation, and digital access. This case study outlines participants' associations between these inequalities and mental distress, particularly regarding the socioeconomic legacies of the pandemic, including the intensified burdens of care work and ongoing economic and educational uncertainty amid austerity and cost of living crises.

This case study initially outlines background literature and context related to COVID-19, inequalities, and mental health in the UK. It then describes the participatory methodology employed during the 'Commission for Pandemic Governance and Inequalities'. This is followed by discussions related to the mental health impact of public health racism during COVID-19, amidst additional structural barriers to health services and the care burdens this imparted. For example, Roma and Somali participants described the care work required to mitigate the mental health consequences of grief, fear, and loss, given the disproportionate rates of illness and death in their communities. This care work, often taken up by women, in turn presented mental health burdens for these participants, who represent key figures mediating between the public health system and their communities. In this way, the 'unprecedented' social conditions of the pandemic introduced new dimensions of inequality, often intensifying long-standing raced, gendered, classed, and generational inequalities, already compromised in a context of austerity.

Drawing from discussions with a group of young leaders alongside Leaders Unlocked[13], the focus is then on the impact of additional inequalities on young people's mental health, particularly related to the failures of school policies and Child and Adolescent Mental Health services (CAMHs) during COVID-19. Younger participants described how volatile school closures produced anxiety among students, particularly those with pre-existing vulnerabilities to COVID-19 or mental distress, living in institutional care settings, or those without digital access. This has policy implications related to pandemic preparedness and mental health resourcing in the UK. It supports recommendations for targeted sustainable investment in mental health and related care services (e.g., CAMHs, elder care, childcare, and adult social care), particularly responsive formal and informal care networks. It also emphasises the crucial

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[13] https://leaders-unlocked.org/

role of ethnographic and participatory methods in understanding and addressing the mental health outcomes of social inequality.

Background

In the UK, the cost of living has been rising since COVID-19, Brexit, and the war in Ukraine. Wage cuts and price increases have had an unequal impact, particularly affecting younger people and lower-income earners (Lyon, Dhingra, 2021: 5). Increasing evidence highlights links between economic crises and mental health disorders. For example, the Office for National Statistics (ONS) has highlighted associations between depression and the cost-of-living crisis. In a 2022 survey, they estimated that the prevalence of moderate to severe depressive symptoms was higher among adults who were economically inactive because of long-term sickness (59%), unpaid carers of ≥35 hours a week (37%), disabled adults (35%), adults in the most deprived areas of England (25% versus 12%), young adults aged 16–29 years (28%), single person households (21%), and young women (35%) (ONS, 2022a). The rate of depression among homeowners was 10%, but significantly higher among renters at 27%, reflecting the impact of housing on mental health (McPhillis, 2017). While these statistics do not infer direct causal links, they depict a clear correlation between socioeconomic disadvantages and common mental health disorders (CMDs) in the UK; particularly depression and anxiety.

Ongoing austerity policies since 2010 also continue to undermine health equality in the UK. Marmot's 'ten years on' 2020 review showed how, for the first time since the beginning of the 20th century, life expectancy has stalled—and in some places declined—likely as a result of austerity (Marmot et al., 2020). Their research shows how cuts in public spending align with increased socioeconomic inequality and poverty, with unequal health outcomes (*ibid*: 5). Tax and benefit reforms have had a negative impact on the net household income of the most deprived, and a positive impact on the least deprived (*ibid*: 82; Hood & Waters 2017: 230). Despite the 'levelling up' agenda, which prioritises economic growth across regions, and austerity measures justified in the name of 'ordering public finances' (Marmot, 2022), markets in the UK remain volatile, for which public goods increasingly serve as collateral, subject to new forms of extraction. Ongoing and intensifying austerity measures further starve the "fragile networks" (Storer & Simpson, 2022) which provide needed 'social infrastructures' and necessary life-sustaining care provision.

Various participants in this research highlighted the crucial role of voluntary and community sectors during the pandemic response. In a context of long-standing interpersonal, institutional, and structural racism, Black, Asian, and minoritised communities in the UK faced disproportionate losses during the COVID-19 pandemic (Haque et al., 2020). Widespread distrust in the formal public health system intensified the role of key figures able to mediate between the health system and their communities during the health crisis, some of whom participated in the 'Commission for Pandemic Governance and Inequalities'; this methodology is summarised in the following section. Insights related to the mental health burden of this role, intensified during COVID-19 and under austerity conditions, are highlighted in this report. It also highlights the perspectives of young people aged 16–25, the age group with the largest recorded increase in mental health disorders since COVID-19 (ONS, 2022b).

Methods

This report has its roots in research undertaken as part of the 2023 Commission for Pandemic Governance and Inequalities as part of PERISCOPE work package 9 on 'best-practice in multi-level governance'. Our research engaged with key figures involved in pandemic governance across Europe: from global, EU, and regional governments (CEPS); medical professions (FEAM); national government and the voluntary and community sectors (LSE); and local officials and citizens (LSE, KI). This case study stems from UK-based research led by LSE anthropologists.

Inequalities exacerbated and introduced during COVID-19 were discussed during a one-day participatory workshop with people who work across their communities and the public health ecosystem. These people have a uniquely informed perspective on the role of COVID-19 policy in perpetuating inequalities, and what worked to mitigate them. Their work relies on long-standing relationships of trust to promote public health initiatives in marginalised communities, where otherwise histories of stigma and exclusion have elicited mistrust and distrust of authorities and their directives (Storer, Simpson, 2022). The discussion was facilitated through an open-ended, collaborative approach, designed to co-create a safe space for empathic conversations about difficult experiences related to COVIDE-19–related illness, death, and loss, and the violent harm of racialised, classed, gendered, and other inequalities. This was informed by long-term research relationships between participants and LSE anthropologists. This builds from the legacy of the LSE Covid and Care project (Bear et al., 2021), which drew from co-produced ethnographic methods in various contexts across

England to inform appropriate policy responses during the pandemic. This project advocated and enacted an 'immersive ethnographic social listening and co-production' methodology, prioritising everyday knowledge and experience, rather than extractive 'tick-box' research.

The report also draws from a series of workshops conducted with a group of young people. These workshops were hosted alongside Leaders Unlocked, an organisation working to involve young people in decision-making. Leaders Unlocked were involved in the Commission with the aim of designing future pandemic policies which accommodate young people's health, educational, economic, and social needs. This research included 3 workshops with 14 young people aged 16–25 from across England. They have shared their policy ideas for 'a future fit for young people' during an LSE public event, which will also be disseminated through a co-authored public policy report (forthcoming, 2023). Many of the young people involved in the project had extensive knowledge about the mental health consequences of inequalities introduced during COVID-19 for young people; as, in some instances, researchers of the impact of COVID-19 on young people; as users of Child and Adolescent Mental Health Services (CAMHs); or as carers of parents with mental health problems. The knowledge discussed during these workshops is cited here alongside key statistics and literature.

Overall, this study adopts a pluralistic approach on the mental health knowledge and experiences of various actors (Wenceslau & Ortega, 2022; Lovell et al., 2019) which allows for a nuanced, grounded position across debates around mental healthcare; from mental health movements which promote access to mental health services intended to alleviate human suffering, to the 'cultural critiques' which highlight the power dynamics underpinning these movements (e.g., Han, 2012; Kirmayer, Pedersen, 2014; Summerfield, 2012). In the aftermath of COVID-19, these critiques are pertinent to the dangerous potential of pathologising populations in an 'epidemic of mental health'[14], legitimising further social control or political abandonment. Keeping these important concerns in mind, this study recognises mental health as a salient category for articulating difficult experiences, social disconnection, and inequality, and for advocating for government accountability and adequate provisioning (Bear et al., 2021). It conceptualises mental health as interrelated with socioeconomic inequality and structural neglect—in terms of attribution, and how it is defined, experienced, understood, and managed. Data are analysed according to a 'syndemic' framework (Singer et

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[14] See Summerfield, 2018. 'NHS antidepressant prescribing—what do we get for £266 million per year?'. Available at:https://blogs.bmj.com/bmj/2018/02/27/derek-summerfield-nhs-antidepressant-prescribing-what-do-we-get-for-266-million-per-year/#:~:text=This%20%E2%80%9Cepidemic%E2%80%9D%20of%20depression%20lets,%2C%20gloominess%2C%20bitterness%2C%20misery, accessed 24th August 2023.

al., 2021), given the compounding effect of multiple health inequities related to COVID-19 and mental health.

Key Findings

COVID-19, Raced Inequalities, and Mental Health

Extensive evidence has highlighted how responses to the COVID-19 pandemic have exacerbated historically racialised inequalities, which shaped the epidemiological profile of the COVID-19 pandemic (Gamlin et al., 2021). There were disproportionate rates of mortality and severe illness among Afro-Caribbean, Black British, Pakistani, and Bangladeshi British people at different stages of the pandemic (Bear et al., 2021). Despite this, authorities have neglected to engage properly with the health and mental health consequences of racial inequalities, and institutional silence on racial disparities and discrimination remains pervasive. It is therefore as crucial to consider the racialised impact of COVID-19 in England as it is elsewhere.

Long histories of racism have elicited mistrust in public health services, compounding mental distress in racialised communities who sustained significant losses from COVID-19. Black people have historically been over-represented in mental health services in the UK, which is linked to racism and related structural determinants of health. This is evident in the higher prevalence of some conditions in Black communities (McManus et al., 2014: 38) and disproportionate rates of involuntary detainment (Gajwani et al., 2016).

Embedded structural racism underpins relative economic disadvantages related to poverty, employment, housing, and schooling opportunities, which have been linked to CMDs (Synergi, 2018). Participants have also described encounters with interpersonal racism within the health system among Black, Asian, and minoritised communities, as both service users and providers, which can increase the likelihood of developing depression and post-traumatic stress (ibid). Racism can also elicit embodied trauma and present a barrier to formal healthcare-seeking in the future (Burgess & Choudary, 2021; Kapadia et al., 2022: 62; Bede & Lewis: 16).

Structural racism has also been associated with public health communications around the vaccine, which moralised health decisions of particular minoritised communities without recognising historical legacies of mistrust in health authorities due to long-standing experiences of harm, stigma, and discrimination. A participating community advocate[15] described how, in her Somali community, a sense of being 'unseen' by health authorities leads to mistrust around vaccine orders, **"you never talked to me. You never see me, yet you told me to take your vaccination."** She also relates this mistrust in the health system to higher rates of chronic illness, mental distress, and disability among Somali people in the UK.

> *Now, all of that mistreatment in the health system and history of mistreatment, wrong, and overdiagnosis, the government takes the initiative that* ***now we need to trust you without any open dialogue, and think that we should accept the vaccination after everything that happened, without any doubts****…I think that it's important to explain why that is, why the hesitancy when the vaccine happened.* ***Because we were never part of the conversation, for years we were ignored.***

As an advocate for mental health and women's rights, she described the anger caused by the trauma of racial and social injustice she encounters as a Somali mother and psychotherapist, which motivates her work. She finds that her community "internalises everything" related to the harms of state abandonment, and in her role as a therapist she seeks to equip people with the skills to manage that. This means giving up her time to offer therapy, run workshops, and write reports for free.

> *"I was doing workshops for them and mental health awareness and teaching them how to regulate their emotions, mindfulness. And that is how we survived the difficult times [of COVID-19]. That was horrific…I kind of gave therapy to everybody. I don't have that capacity".*

Her work providing mental health training, support, and therapy exemplifies the ways people initially came together to help themselves in a situation of incredible mental strain, loss, and grief. This relates not only to disrupted access to support systems, such as being unable to pray or visit family during lockdowns, but also the lack of access to limited government provisions for mental health support through COVID-19, despite its significant impact on people's well-being. As with other 'mediators', she offers guidance to people regarding which care services to seek out and trust.

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[15] Many thanks to Suad Duale, psychotherapist and advocate for women's mental health, for sharing the knowledge and experience that underpins this discussion. See this participatory film co-directed by Dr. Nikita Simpson and Dr. James Rattee for further insight into Suad's important work with Somali single mothers.

> *"That's my role now…I have a mother coming to me saying, 'I'm struggling with my child, what do I need to do, do I need to go to a social worker?' If I say yes, she will call, if I say no, she will not call. That is basically it…because I know how these people think and I live with them…so now I'm this call centre!"*

In acting as a 'call centre', she provides an informal health system for the Somali, Black, Arab and Asian communities she works with, extending the reach of public care services and mitigating their shortcomings. This includes the lack of access to and trust in the health system. As she puts it,

> *"people cannot reach the service, no one looks like them and there is the fear and distrust and history of mistreatment they experienced and not trusting the system and we're doing that job now—where services never communicate or see these people."*

Through her personal phone, the people she works with could address the difficulties of accessing increasingly online health and social services, which often require English language and literacy skills, presenting further barriers to accessing formal healthcare and posing yet another stressor to people's mental health.

A lack of political representation—for example, Somali representation in local bureaucracy—further establishes the 'invisibility' of particular minoritised communities in pandemic responses and beyond. This has the potential to feed through to commissioning decisions. As a community activist and health sector expert put it, there was a **"complete disconnect between the person making decisions and the people on the ground".** And as a Roma participant put it, "there are some unseen, completely unseen communities in Britain today". She refers here not only to the Roma community she works with and is a part of, but also other communities who are undocumented, such as undocumented migrants and those living in undocumented housing, people who have no data or are unbanked, and those who do not have access to computers and mobile phones. These people may work in the informal economy, receiving 'cash in hand', and therefore were neglected by furlough policies in 2020 and 2021. This state neglect intensifies reliance on various forms of mutuality and community support.

It is important to note that participants also considered disabled people to have been particularly neglected and '*unseen*' in the government COVID-19 response; as participating voluntary sector leader in west London put it, "everyone seems to have forgotten about people with disabilities…most people with disabilities couldn't get out". The violence of this neglect is ongoing; important evidence highlights the severe and potentially fatal health and mental health consequences of austerity and welfare reform for many disabled people in the UK[16].

As this PERISCOPE research on 'pandemic governance and inequalities' showed (PERISCOPE, 2023), key actors take up the relational work of bridging between the health system and particular minoritised communities in order to mitigate crises of health inequalities. This work was found to be particularly crucial to the pandemic response. According to participants, it has also introduced new mental health burdens. A community activist with extensive experience working across communities in public health, local authority, and NHS sectors, described the 'anxiety' and 'burnout' caused by taking up a role in the 'chasm between system and community', of operating in these various spaces, roles, and identities. This vital role should therefore be better supported, recognised and resourced on a sustained basis, in order to prevent the mental health impacts of this relational work and the inequalities that it mitigates. In particular, there is a need to recognise the issue of imparting excessive responsibility on people working to provide care and deliver services in the increasing absence of state welfare provision.

Clearly, there is a need to bridge this 'disconnect' and visibilise structural racialised inequalities and their mental health outcomes. This is particularly crucial during the ongoing cost-of-living and austerity crises, which are significant socioeconomic determinants of mental health and pose additional strains to over-burdened mental health services. As discussed in the following section, the young people we have worked with as part of this research similarly highlight the mental health impact of being 'unseen' during the pandemic, which presented new inequalities and insecurities, as well as barriers to education and mental health services.

COVID-19 & Young People in the UK; 'Falling Through the Cracks'

This section of the report highlights the unequal impact of the pandemic and the government response on healthcare, social, and education services, and the effect of this on young people's mental health. Young people aged 16–34 have had the largest increase in mental health disorders since COVID-19—this is the only age group found to have had an increase in 'depression', 'bad nerves', or 'anxiety' (ONS, 2022b). Younger people are also least likely to have their mental health treatment needs met (McManus et al., 2014: 100). From the

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[16] For further information, see Deaths by Welfare Timeline, Healing Justice London. https://healingjusticeldn.org/resources/deaths-by-welfare-timeline/, accessed 15th August 2023.

perspective of the young leaders who participated in the commission alongside Leaders Unlocked, public institutions failed to adapt to the pandemic situation, which presented new inequalities and related mental health burdens for young people in particular. These young leaders are collating their experiences, reflections, and ideas for 'a future fit for young people' in a forthcoming public policy report; key themes of the discussions are summarised here in order to highlight the significant impact of COVID-19 inequalities on young people's mental health.

The additional strains caused by the pandemic—particularly for those already vulnerable to COVID-19—were associated with anxiety and depression. For example, the inconsistency and rapid policy changes related to school closures resulted in a lot of fear and confusion. Isolation from social networks and reliance on social media for connection was also frequently noted as presenting a particular risk to young people's mental health. Amidst this new insecurity, many young participants felt failed and abandoned by the government, by schools, and by Child and Adolescent Mental Health Services (CAMHs). They perceive these failures to have increased socioeconomic inequality and in turn affected young people's mental health, learning, and development.

In a context of digital and spatial inequalities, lockdowns presented additional barriers for many young people in poverty and from minoritised backgrounds to bridge the attainment gap between them and their more privileged peers. This has particularly long-term implications for students in transitional phases, such as those in years 11 and 13. In higher education, higher income university students lost 40% of their teaching hours in 2020, in contrast with students from lower income backgrounds who lost 53% (Elliot Major et al., 2021). Those not taking exams were deprioritised, impacting their mental health and causing some young people to, as one young participant put it, "fall through the cracks". This is reflected in increasing numbers of so-called 'ghost children' no longer attending school after lockdowns, reflecting the idea of marginalised people as 'unseen' and neglected. The young leaders participating in the commission have found that many young people fell behind during this period and are still struggling to catch up, causing anxiety and mental distress. This is particularly the case for students if they were neuro-diverse, had a pre-existing mental health condition, or were predisposed to becoming mentally unwell. This demonstrates the mental health consequences of new educational inequalities caused by the COVID-19 pandemic, operating along established lines of disadvantage, and with the potential to do long-term harm.

A sense of neglect and abandonment was particularly felt by young people seeking CAMHs services. During the pandemic, CAMHs services were disrupted, appointments cancelled, and mental health crises prioritised. This meant that many young people were unable to access necessary mental health support and, as one young participant put it, “some are likely to have fallen off the radar altogether”. At a time of unprecedented mental health burdens and record demand for CAMHs, waiting lists dramatically increased[17]. With CAMHs oversubscribed and schools closed, early interventions supporting those with mental health conditions has been lacking. New experiences of uncertainty, grief, and insecurity have been precipitated and exacerbated by COVID-19 for younger generations, who have been overlooked in decision-making and service provision; falling ‘off the radar’ and ‘through the cracks’. Instead, children and young people faced the upheaval of institutions and social networks meant to support them, with governments, schools and health services continually changing the (differentially applied) rules. This insecurity is ongoing during the subsequent economic crises and amid the rising cost of living, with increased food poverty,[18] and housing insecurity (Fetzer et al., 2023), and is likely to have far-reaching mental and social health effects (Weaver et al., 2014). The younger generations have been particularly impacted by this economic uncertainty, being twice as likely to have lost their jobs during COVID, and with nearly 6/10 of 15–25-year-olds seeing a cut in their earnings since the pandemic (Elliot Major, Eyles, Machin, 2021).

As in the work of Leaders Unlocked, it is crucial to consider young people’s perspectives on the unequal mental health impact of health crises and related responses, to ensure that they are centred in decision-making going forward—countering the political abandonment and neglect of the younger generation fostered since COVID-19. This is vital work toward ‘a future fit for young people’.

Conclusion

Overall, this report has considered the impact of COVID-19 on the mental health of young people and people of racially minoritised communities. This study applies an anthropological approach to social configurations related to COVID-19, manifested in unevenly distributed mental health outcomes. This recognises mental health as a salient category for articulating difficult experiences, social disconnection and inequality, and for advocating for government accountability and adequate provisioning (Bear et al., 2021).

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[17] See: https://www.nuffieldtrust.org.uk/news-item/the-pandemic-has-driven-unprecedented-surge-in-demand-for-mental-health-services-for-children-and-young-people

[18] See: https://www.trusselltrust.org/news-and-blog/latest-stats/end-year-stats/

Participants highlight a sense of abandonment and neglect in relation to public institutions and government policy during COVID-19. Young participants discussed the failures of education policies and CAMHs to take account of inequalities and provide adequate mental health support during the upheaval of the pandemic. This has long-lasting legacies during ongoing cost of living crises, again further disadvantaging young people, and allowing more of the younger generation to slip ‘through the cracks’.

This research addresses UK policymakers’ silence on inequalities created and intensified since the pandemic, by emphasising the perspectives of otherwise ‘unseen’ communities and age groups. It also has relevance across EU contexts, as shown during research on ‘best practice in multi-level governance’, which highlighted the unequal impact of COVID-19 on marginalised groups and young people, and the crucial role of ‘social infrastructures’ in mitigating this (PERISCOPE, 2022; 2023). The adverse mental health outcomes of socioeconomic conditions should be addressed as a social justice issue (PERISCOPE, 2021). This includes targeted, sustainable investments in mental health and related care services (elder care, childcare, adult social care), particularly responsive formal and informal community-based care. As proposed by Laura Bear, pandemic and healthcare policies should be evaluated according to a “social calculus”, “to mitigate the unequally distributed impact of COVID-19 with an enduring aftermath of amplified inequality” (PERISCOPE, 2021: 54). In this way, anthropological ethnographic and participatory methods can play an important role in understanding, managing, and preventing mental health outcomes of social inequality (Azevedo et al., 2022). Arguably, this is particularly pertinent in preparing for future health and economic crises to prevent the ‘mental health epidemic’ of intensifying inequalities in the UK and beyond.

Acknowledgements:

The author would like to thank all the participants and researchers involved in this project. This includes psychotherapist and mental health advocate Suad Duale cited in this discussion, as well as Rose Dowling, founder of Leaders Unlocked and the many young leaders involved in the commission workshops. LSE researchers involved and cited here include Dr. Liz Storer, Professor Laura Bear, Dr. Nikita Simpson, and Dr. Iliana Sarafian. Thanks also to the PERISCOPE team involved in work package 2, particularly Dr. Marta Dell’Aquila of FEAM, for her feedback and insights.

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3. Impact of COVID-19 on the mental health of refugees and migrants

3. Impact of COVID-19 on the mental health of refugees and migrants

3.1 Impact of regulations on migrants with psychosocial disabilities and mental health problems

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Executive Summary

The right to health and access to healthcare is a basic human right; nevertheless, COVID-19 laid bare existing inequalities. This unprecedented time emphasised the urgency of accessible, adequate, and affordable mental healthcare, as well as the need such care be deemed as important and interconnected to physical health. Due to the disproportionate impact of the pandemic on those in existing vulnerable situations, including people with psychosocial disabilities, this report also captures the impact of regulations on migrants with psychosocial disabilities and mental health problems.

Overview

The terms "refugee", "asylum seeker", and "migrant" refer to people on the move, who have left their countries and have crossed borders. Although the terms "migrant" and "refugee" are often used interchangeably, legally they have different meanings.

The term 'refugees' refers to people who have fled their own country because they are at risk of serious human rights violations and persecution. This is often due to perilous and intolerable situations forcing individuals to leave and seek safety outside their country, and thus become internationally recognised as 'refugees' with rights to access international protection. When people flee their own country and seek sanctuary in another country, they apply for asylum—the right to be recognised as a refugee and receive legal protection and material assistance. Therefore, 'asylum seekers' are individuals who have fled their home country and are seeking protection and asylum in another country to be legally recognised as a refugee. Seeking asylum is a human right. This means everyone should be allowed to enter another country to seek asylum. In contrast, although the term 'migrants' has no internationally legal definition, it is often understood to include those who move outside of their country of origin and are neither asylum seekers nor refugees.

The World Health Organisation (WHO) defines mental health as "a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community"

(WHO, 2022a). This is a broad description, linking mental health to personal growth and participation in society. It is also broad in the sense that it allows mental health and mental health problems to co-exist at the same time. 'Psychosocial disabilities' is an internationally recognised term (CRPD, art. 11), describing the experience of people who have mental health issues which, in interaction with various societal barriers, can 'disable' them and hinder the full realisation of their rights.

Mental health problems are the opposite of mental health. They refer to a state where a combination of factors, such as a person's life, social, economic, and cultural environment, negatively influence their well-being. As such, mental health problems can prevent individuals from reaching the highest possible level of well-being if paired with societal barriers (MHE, 2023a).

Another important clarification concerns intersectionality. Intersectional discrimination refers to the unique and compounded forms of discrimination that individuals or groups may experience due to the interaction of multiple facets of their identity, such as race, gender, sexual orientation, socioeconomic status, disability, and more. In other words, it recognises that individuals can face discrimination based on the intersection of different aspects of their identity, rather than just one isolated factor. The concept of intersectionality underlines complex identities, interconnected systems of oppression, unique experiences, and power dynamics (Coaston, 2019). Concerning mental health, individuals at the intersections of multiple marginalised identities may experience mental health challenges differently from those who do not share the same intersections. Therefore, applying an intersectional lens can have a pivotal role in addressing cross-cutting issues and ensure tailored mental health support and mechanisms are prioritised[19].

Migration is an integral part of inclusive societies. Various factors can influence the movement of people, which can either be voluntary or forced movement due to disasters, economic challenges, extreme poverty, or conflicts. Migrants and refugees are more likely to experience risk factors of poor mental health through intersecting challenges that negatively affect physical and mental health. Risk factors can include social disadvantages, poverty, bereavement, and homelessness or poor housing, among others. They are also less likely to be exposed to protective factors for mental health, such as wider support systems, good housing, and access to adequate employment. These stressors take place at various stages of the migration process: pre-migration, on the move, and post-migration; at their destination or host country.

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[19] See: Better Help, *Intersectionality & Mental Health*, June 2023: https://www.betterhelp.com/advice/inclusive-mental-health/intersectionality-and-mental-health-using-an-intersectional-lens/.

Socio-economic factors impacting refugees and migrants

Refugees and migrants remain among the most vulnerable and neglected members of many societies. They are exposed to various stress factors affecting their mental health and well-being before and during their migration journey, as well as upon settlement and integration. The recent *World report on the health of refugees and migrants* published by WHO (WHO, 2022b) estimates that the prevalence of severe mental problems is high (up to 22%) among conflict-affected populations, including refugees, at any given time. Moreover, more than ever before, many refugees and migrants face poorer health outcomes than host populations (Platt, Warwick, 2020). This can be due to limited access to healthcare services, and the increased likelihood of socioeconomic challenges, including poverty, unemployment, labour, high-contact jobs, and inadequate housing. Other reasons can also include overcrowding and cramped living conditions, including those in reception and detention centres (ECDC, 2020), cultural and language barriers, inadequate nutrition and sanitation, and reduced access to or limited health information (Greenaway et al., 2020).

Refugees and migrants (including undocumented migrants) have unique experiences, which require tailored mental healthcare and support that are culturally sensitive and appropriate. More than one billion people are on the move globally, about one in eight of the global population. Of this total, 281 million people are international migrants and 84 million are forcibly displaced (48 million are internally displaced, 26.6 million are refugees, and 4.4 million are asylum seekers)[20]. Among the forcibly displaced, 35 million are children and 1 million were born into refugee life. The number of people on the move is expected to grow due to poverty, lack of security, lack of access to essential services, conflict, environmental degradation, and disasters (Chamie, 2020).

Refugees and migrants often face worse health outcomes in countries of transit and destination due to barriers including language and cultural differences, institutional discrimination, and restricted use of health services. Social, political, and economic exclusion can result in poverty, homelessness, and exploitation, which can create a higher risk for health-related problems, including mental health problems. In particular, the COVID-19 pandemic has exacerbated existing inequalities in certain populations, which may include refugees and migrants; particularly those in irregular situations. Refugees and migrants have a variety of different physical and mental health needs, shaped by experiences in their country of origin, their migration journey, their host country's entry and integration policies, and living

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[20] See the factsheet by the WHO, *Refugee and migrant health*, 2022. https://www.who.int/news-room/fact-sheets/detail/refugee-and-migrant-health

and working conditions. These experiences can increase the vulnerability of refugees and migrants to chronic and infectious diseases.

Refugees and migrants may also be at risk of poor mental health because of traumatic or stressful experiences. Many of them experience feelings of anxiety and sadness, hopelessness, difficulty sleeping, fatigue, irritability, anger, or aches and pains. They may be at more risk of depression, anxiety, and post-traumatic stress disorder (PTSD) than their host populations[21].

Refugees and migrants are a diverse group and have a variety of health needs, which may differ from those of the host populations (Rechel et al., 2011). The COVID-19 pandemic has disrupted health services, placing people already in vulnerable situations at heightened risk and hampering the ability of health systems to respond to their needs.

Refugees and migrants often come from communities affected by war, conflict, natural disasters, environmental degradation, or economic crisis. Refugees and migrants may arrive in the country of destination with poorly controlled non-communicable diseases, as they may have not had access to or received care of any kind during the journey. Maternity care is usually the first point of contact with healthcare systems for female refugees and migrants.[22] Often there is a lack of consideration for the identification of health, social, and mental health needs of migrants, including people with insecure status, such as undocumented people.

Undocumented people frequently live in very precarious situations, often facing difficult living and working conditions, limited economic opportunities, exclusion from key services, and the possibility of facing deportation which can contribute to chronic stress, uncertainty, inequalities, and erode health, well-being, and mental health. Unaccompanied minors are particularly at risk of developing mental health problems. Factors contributing to the high risk of developing mental health issues include forced separation from the child's family, the death of a close family member, and a lack of social support.

The United Nations Convention on the Rights of Persons with Disabilities (CRPD)

Although governed by separate legal frameworks, refugees and migrants are entitled to the same universal human rights and fundamental freedoms as other people. In particular, the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) which also protects people with psychosocial disabilities, provides a legal framework to which the EU and its member states must abide. The UN CRPD is an international human rights treaty adopted

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[21] *Ibidem*.

[22] *Ibidem*. See also BMA, 2019.

in 2006 which reaffirms that all persons with disabilities must enjoy all human rights and fundamental freedoms. The convention and was signed and ratified (i.e., approved) by the European Union and by all its member states, placing an obligation on those responsible to comply with and protect the rights of persons with disabilities, including migrants and refugees with mental health problems and psychosocial disabilities.

The Convention promotes the rights of persons with disabilities and underlines that all persons with disabilities have the right to participate in the civil, political, economic, social, and cultural life of the community. The UN CRPD recognises the vulnerability and specific needs of persons with disabilities and emphasises the importance of ensuring their rights and well-being. The convention promotes non-discrimination and equal treatment for persons with disabilities, including migrants and refugees, in all areas of life. It also prohibits discrimination based on disability and underlines the need to ensure equality of opportunity and access to services. The UN CRPD also stresses the importance of accessibility for persons with disabilities, including physical, informational, and communication accessibility. The convention calls for the removal of barriers that hinder their full and equal participation in society, including in the context of migration and refugee situations. This also requires national legislation on mental health to be more socially and less medically oriented and in line with UN CRPD. Moving towards human rights compliant community mental healthcare is an obligation under the UN CRPD; however, this is not yet the case, despite the EU's and all EU Member States' ratification of the convention.

Regarding mental health support services, the UN CRPD has changed the way we understand disability, including psychosocial disability. This important change is referred to as a paradigm shift: from a biomedical model to a psychosocial model of mental health. The UN CRPD requires moving mental health services away from coercive, overly medicalised, and isolating practices toward systems which respect people's human rights, are community-based, supportive, and empower people with psychosocial disabilities to live independently (MHE, 2023b)[23].

Mental health of migrants and refugees—impact of regulations

The COVID-19 pandemic had significant impacts on migrants and refugees across Europe and globally. Urgent measures implemented by EU governments to contain the spread of the virus, such as the re-introduction of border controls, implementation of temporary travel

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[23] NB. Migrants may be given a migration status that limits their entitlement and access to healthcare. However, international law guarantees universal access in line with the 2030 Agenda for Sustainable Development, in particular with Sustainable Development Goal 3 ("Ensure healthy lives and promote well-being for all at all ages").

restrictions, and introduction of sanitary measures, had immense bearing on both mobility and migration. Various rules and measures were implemented in response to the pandemic, affecting their mobility, access to services, legal status, and overall well-being. During the pandemic, while travel restrictions were not applicable to asylum-seekers or individuals "who must be admitted to the territory of the Member States for other humanitarian reasons", the border closures in Europe profoundly affected asylum-seekers (Mentzelopoulou, Spinelli, 2022).

Changes to the Asylum system

Under the pretext of emergency measures, various changes were made to asylum procedures in the European Union (EU) as a result of the pandemic to respond to the public health crisis and ensure the safety of both asylum seekers and the host populations. These changes varied from country to country and evolved over time. However, common changes were observed (Čučković, 2021).

Primarily, the pandemic led to the suspension of or limited access to asylum procedures. Here, several EU countries suspended or limited access to their asylum procedures during the early stages of the pandemic. This was contrary to the adopted European Commission Communication providing for temporary restriction of non-essential travel to the EU due to COVID-19, which explicitly excluded "persons in need of international protection or for other humanitarian reasons" (EC, 2023; EC, 2020). This impacted the way member states implemented European law provisions and related administrative procedures regarding asylum, return, and resettlement (Marin, 2020). For example, Italy and Malta denied access to both territory and asylum procedures to newly arrived migrants after declaring their ports unsafe for disembarkation (EASO, 2020). Similarly, Greece and Hungary denied entry to persons seeking asylum and suspended the right to apply for asylum (Marin, 2020).

On the other hand, some countries implemented good practices, such as Portugal which granted citizenship rights to all asylum seekers whose applications were still under consideration at the time[24]. Germany and Sweden enabled persons in need of international protection to both enter their territories and submit asylum applications (ICJ, 2020). Spain did not require asylum seekers to have valid documents to receive healthcare (Dimitriadi, 2020) and supported and released migrants from administrative detention (PICUM, 2020). However, Spain did suspend the right to apply for asylum (Marin, 2020). Luxembourg automatically extended the status of those with ongoing asylum applications.

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[24] See: Euronews, *Coronavirus: Portugal grants temporary citizenship rights to migrants*, 2020. https://www.euronews.com/2020/03/29/coronavirus-portugal-grants-temporary-citizenship-rights-to-migrants

Other adaptations made due to the pandemic included a shift towards remote and digital procedures to reduce face-to-face interactions during interviews, and hearings were conducted through video conferences or other virtual means. This aimed to minimise in-person interactions while still allowing for the processing of asylum claims. At the same time, new obstacles arose in ensuring an effective and fair asylum procedure for first instance applications and appeals, relating, for example, to the quality of remote interviews, applicants' access to electronic tools and the skills needed to use them, and the quality of processes and data protection. While this process may have been supported with application backlogs, remote formats may not have best served vulnerable parties, especially those with low digital literac and those with disabilities, including mental health problems or psychosocial disabilities. More generally, the realities of the pandemic resulted in reduced access to legal assistance and limited access to reception services. The suspension of asylum procedures and the shift to remote processing caused delays in the processing of asylum claims. Therefore, asylum seekers experienced lengthy stays in reception centres or other accommodation facilities while awaiting the outcome of their applications. In some countries, arriving asylum seekers were required to undergo mandatory quarantine periods as part of the public health measures, leading to forced isolation.

In essence, the confluence of COVID-19 restrictions, various changes made to asylum procedures, and bad practices regarding asylum after the outbreak of the COVID-19 pandemic may have led to the further exacerbation of mental health distress of asylum seekers, refugees, and their communities (Mentzelopoulou, Spinelli, 2022).

Although these changes were introduced to respond to the unique challenges posed by the pandemic, they also raised concerns about procedural fairness and access to legal representation. After mid-April 2020, EU Member States gradually lifted restrictions and started to adapt to the new reality after the pandemic, and ensure compliance with international human rights standards (Mentzelopoulou, Spinelli, 2022). However, this does not negate the mental health risk factors elevated and the mental health protective factors reduced during that time and beyond, which may have impacted and may continue to impact the mental health of these vulnerable groups.

Insufficient Mental Health Support

One of the major breakdowns of European policies includes a lack of adequate mental health support for migrants. Many migrants, including refugees and asylum seekers, have experienced traumatic events before and during their migration journeys. However, mental health services and psychosocial support have often been limited, underfunded, and not easily accessible. This has resulted in a lack of tailored mental health support. Increased capacity for mental health services is essential. As mental health is a cross-cutting topic, holistic support is required. People in vulnerable situations or those facing intersectional discrimination—such as migrants and refugees—are more at risk of experiencing poor mental health. For example, refugees and migrants also face additional determinants (legal status, discrimination, social, cultural, administrative, linguistic, and financial barriers), thus further diminishing their general level of well-being. Therefore, solutions that consider the links between such socio-economic conditions and mental health are necessary for tailored mental health support and improved mental health outcomes.

Barriers to Accessing Services

Migrants and refugees already faced numerous barriers when accessing mental health services, including language barriers, cultural differences, lack of information, and fear of stigma and discrimination. The measures introduced under the pretext of emergency measures (highlighted above) have not consistently addressed these barriers, resulting in reduced access to mental health support for migrants. Additionally, administrative complexities and legal uncertainties surrounding migrants' status can further hinder their ability to access necessary services. Undocumented migrants, for example, are also overlooked in legal processes. Therefore, in most cases, individuals cannot legally access mental health services. People in irregular situations risk being reported, detained, and deported when trying to access essential services, including mental health services. To ensure that everyone is treated based on need and not their status, the delivery of services must be delinked from immigration enforcement actions. A 'firewall' in healthcare protects individuals from discrimination, and protects the integrity of our health systems.

Refugees' mental health has traditionally been approached with a focus on pre-departure experiences; that is, persecution. The COVID-19 pandemic has, however, highlighted the need for a comprehensive approach to refugees' mental health across the whole migration journey, as other factors that influence refugees' mental health have been impacted by the pandemic. These include employment and income, housing and accommodation, asylum procedures, cultural practices and language proficiency, social support and isolation, and discrimination and stigma.

Failure to Address Trauma-Informed Care

Many migrants and refugees have experienced traumatic events, including conflict, violence, and forced displacement. Trauma-informed care, which recognises the impact of trauma on mental health and promotes sensitivity and understanding in service provision, has not been consistently integrated into EU migration policies. Trauma-informed and recovery-based approaches to mental and emotional health should be central to humanitarian aid and support for refugees. As an example, mental health support should be incorporated into the needs assessment for refugees and helplines. Existing services at the national level should also be adapted to migrants on the move. To help overcome language and cultural barriers, mental health professionals that can communicate in the languages of refugees could also play a key role in providing mental health support.

Inadequate Screening and Identification

The EU's migration policies have not consistently incorporated comprehensive mental health screening and identification procedures for arriving migrants. Screening processes that consider mental health problems are crucial for early detection, appropriate referrals, and targeted interventions. Without robust screening mechanisms in place, mental health issues may go unnoticed, leading to a lack of appropriate support and care.

During the pandemic, the awaited EU Pact on Migration and Asylum[25] was released. It set out the European Commission's new approach to migration and was criticised for failing to protect the rights of persons with disabilities and not adopting a human-rights–based approach. This was especially the case considering capacities for providing tailored services were already stretched or non-existent in many places, particularly in the context of scarce financial and human resources.

Before entering, persons who do not in principle fulfil the entry conditions of an EU member state undergo pre-entry screening, which includes identification, fingerprinting, security checks, and preliminary health and vulnerability assessment. This is done to accelerate the process of determining the status of a person, what type of procedure should apply (Fischer, 2021), as well as any need for immediate care or isolation on public health grounds[26]. The EU's proposal of a 'vulnerability assessment' does not adequately consider the rights and needs of persons with disabilities, including psychosocial disabilities.

The proposal fails to explicitly commit to providing reasonable accommodation and support for asylum seekers with disabilities, such as accessible communication formats. Under the Pact, health and vulnerability assessments are carried out during the pre-entry screening

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[25] See: European Commission, *What is the New Pact on Migration and Asylum of the EU?*, https://home-affairs.ec.europa.eu/policies/migration-and-asylum/new-pact-migration-and-asylum_en.

[26] See: Article 9(1) of the Proposal for a Regulation of the European Parliament and of the Council introducing a screening of third country nationals at the external borders and amending Regulations (EC) No 767/2008, (EU) 2017/2226, (EU) 2018/1240 and (EU) 2019/817. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020PC0612&rid=1

process, presenting challenges, since persons with disabilities, including persons with mental health problems, are diverse. Examinations upon mere observation of "immediately identifiable disability" overlook diversity and discriminate against persons with disabilities. As this approach does not truly assess vulnerabilities in all cases, it reintroduces a medical understanding of disability and mental health which does not comply with UN CRPD and international standards.

Limited Training and Awareness

Another limitation includes the lack of sufficient training and awareness among professionals and authorities working with migrants. Healthcare providers, social workers, and immigration officials often lack the necessary knowledge and skills needed to address the specific mental health needs of migrants. Insufficient training can contribute to the underdiagnosis, misdiagnosis, or inadequate treatment of mental health conditions among migrants.

Since individuals and communities assemble to support refugees, there is a high likelihood of varying levels of mental health awareness as well as services that apply a psychosocial approach. Key workers such as volunteers, social workers, teachers, and police are more likely to assist and support refugees under significant stress. Due to the pandemic, such support was significantly reduced. Nevertheless, resources and long-term training are imperative for these professionals to be able to identify and support refugees that have mental health needs. For example, training on mental health can ensure volunteers and relevant professionals are aware of correct referral pathways and can signpost individuals for appropriate support. Training can also help these key workers manage stressful working conditions and their mental health. Moreover, as a process of integration takes place in receiving countries, there is a general need to increase awareness of mental health in the wider population. Here, boosting mental health literacy in the population (e.g., public campaigns and guidance resources) can assist in mental health promotion, the prevention of mental health problems, early intervention, and increased mental health support, which will ultimately result in creating resilient communities.

Inadequate Integration and Social Support

Successful integration is crucial for the mental well-being of migrants. However, the EU's migration policies have faced criticism for not providing sufficient support and opportunities for social integration. Limited access to education, employment, housing, and social networks can contribute to social isolation and negatively impact the mental health of migrants.

Lack of data on mental health

The lack of data collection in general pertaining to mental health provides only fragmented information on the mental health of individuals across Europe. As a result, weak information systems on refugees and migrants with psychosocial disabilities and mental health problems limit evidence-based policies and interventions, the availability of comparable disaggregated data, resource allocation and planning, effective early intervention and prevention measures, and the availability of tailored and culturally sensitive services.

Key Recommendations

Policies or investments focusing on supporting migrants with psychosocial disabilities and mental health problems will not reflect the needs of those targeted without the insight and expertise provided by people with lived experience. Co-creation is a model that promotes such meaningful engagement, emphasising the equalisation of powers of all participants in the process. For the EU and Member States to rapidly progress toward and invest in human-rights–compliant and equitable mental healthcare systems, mental health services should be developed alongside migrants and refugees, including those with psychosocial disabilities, through meaningful consultations[27].

The European Commission should introduce a dedicated and intersectional European Strategy on Mental Health—one that addresses the socio-economic determinants of mental health, paying particular attention to individuals who face multiple and intersecting forms of discrimination, including on the basis of ethnicity, religion, sexual orientation and gender identity, migration status, age, or disability[28].

Addressing the mental health needs of refugees and migrants should become a priority in the principle of the right to health for all. Policymakers and decision-makers should maintain and even strengthen healthcare systems, ensuring these are refugee- and migrant-sensitive and inclusive. Further attention is needed to address this critical topic—such as discussing good practices and challenges and ensuring adequate mental health support is provided in the context of increased migration across Europe. There is a need for cross-border actions and exchanges between EU member states to address the challenges in health and mental health that migrants and others within the migration pathway often face.

An intersectional policy analysis of refugees' mental health helps capture and adequately address their mental health needs and challenges along the migration cycle. These include

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[27] For more information on co-creation in mental health and a framework that includes both the theory and practice of implementing a co-creation approach in mental health, see: Mental Health Europe, *Mental Health Europe Releases a Toolkit on Co-Creation*, April 2023. https://www.mhe-sme.org/mhe-releases-co-creation-toolkit/ and MHE, 2022.

[28] For more information on the need for a European Strategy on mental health, see: MHE, 2019.

community programmes and awareness and advocacy campaigns around mental health. Concerned stakeholders should also ensure that all the relevant services can cater to the specific needs of migrants and provide person-centred support. Services should be culturally sensitive, apply a gendered lens, and should be geographically, financially, and linguistically accessible.

Lastly, there is a need for the implementation of a psychosocial approach to mental health—especially because refugee and migrant health are also strongly related to the social determinants of health, such as employment, income, education, and housing. All measures on migration should comply with the UN CRPD and international standards.

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3.2 Mental health of refugees and migrants during the COVID-19 pandemic: the protective role of social well-being

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Executive summary

Several studies have found a negative impact of the COVID-19 pandemic on the mental health of refugees and migrants, highlighting disproportionately negative effects exacerbated by pre-existing vulnerabilities. Accordingly, it is necessary to gain deeper understanding of what can be protective of their mental health. This research found that feeling connected to different people in your social network, as well as feeling less isolated, were found to mediate the negative effect of the COVID-19 pandemic on respondents' mental health. Therefore, interventions that seek to mitigate the COVID-19 pandemic's effects on refugees' and migrants' mental health must incorporate measures that promote social connectedness and interpersonal relationships.

Introduction

Soon after COVID-19 took the world by storm, it became clear that its repercussions on many aspects of our daily lives would be immense. Specifically, even in the first months of the pandemic, concerns of the impact on people's mental health were being expressed (Holmes et al., 2020). Sure enough, three years later, multiple studies worldwide have found that COVID-19 has had several negative implications for individual's mental health and psychosocial well-being (Bo et al., 2020; Pierce et al., 2020; Qiu et al., 2020; Shigemura et al., 2020; Vindegaard, Benros, 2020; Wang, Pan, Wan, Tan, Xu, McIntyre, et al., 2020; Xiong et al., 2020; Zhang et al., 2020). Added to this, the disastrous impact on the mental health of refugees and migrants has been revealed repeatedly, highlighting that the pre-existing vulnerabilities of these groups results in them being disproportionately affected by the pandemic (Kiteki, Lou, Liu, 2022; Badanta et al., 2022; Hajjar, Abu-Sittah, 2021).

The ApartTogether project, a collaboration between a large European consortium of academics and, as of June 2020, the World Health Organisation (WHO), was designed to assess the mental health of refugees and migrants during the COVID-19 pandemic. Data was collected in an online global survey, translated into 37 languages (World Health, 2020a). In total, N =20,742 participants (aged 16+; M =34.7, SD =2.4), at that time living in 137 different countries, entered the survey between April 2020 and November 2020 (more information on the participants can found in Table 1 or in the WHO report (World Health Organisation, 2020)).

Table 1. Demographic characteristics of the respondents

Variables	N	%
Gender[a]		
Male	11410	57.9
Female	8289	42.1
Residence status		
Citizen	5741	29.5
Permanent documents	5095	26.2
Temporary documents	7259	37.3
No documents	1349	6.9
Housing situation		
House or apartment	17444	90.0
Asylum centre	401	2.1
Refugee camp	1383	6.9
On the street –insecure accommodation	204	1.0

[a] *The question on the participant's gender in the survey was not binary, respondents were able to indicate a gender other than male or female and were invited to specify. Due to the low number of participants that indicated 'other' (0.04%), only gender = male and gender = female was used in the analysis.*

One of the studies that came out of the ApartTogether project indicated that experiences of discrimination and challenges in securing basic and medical needs significantly heightened refugees and migrants' risk of poor mental health (Spiritus-Beerden et al., 2021). In addition, the study looked at specific social and demographic characteristics within this group (i.e., age, gender, housing situation, and residence status) and found that refugees and migrants living in less secure conditions were significantly more likely to report a deterioration in their mental health. Respondents that had no documents or temporary documents, and respondents that live on the street, in insecure accommodation, or in asylum centres, reported comparatively worse mental health outcomes as a result of the COVID-19 pandemic. These results are also in line with research conducted before the pandemic, where a higher risk of developing negative mental health outcomes was found in sub-cohorts of refugees and migrants living in comparatively more precarious situations (Rousseau & Frounfelker, 2019). Furthermore, age and gender both showed significant effects on mental health. Specifically, younger research participants reported a less detrimental impact on their mental health, which is consistent with earlier findings. For instance, older age has been associated with decreased levels of resilience and mental health among people who have been relocated (Siriwardhana et al., 2014).

By knowing more about the COVID-19 pandemic's unequal impact on the psychological well-being of populations in vulnerable situations, we aim to develop a more comprehensive understanding of what could prove protective of the mental health of refugees and migrants. For example, social connectedness, referred to as a sense of interpersonal belonging to one's social context, such as belonging to friends, classmates, or society, has been found to be a fundamental human need that has a considerable positive impact on mental and physical health (Baumeister, Leary, 1995). In this sense, social support and social connectedness could be important to consider in mental health research in vulnerable populations, as they have previously been shown to be protective of mental health (Sommerlad et al., 2022, Behrendt et al., 2022; Schlechter et al., 2021; Schweitzer et al., 2006).

Social connectedness is referred to as a sense of interpersonal belonging to one's social context, such as friends, classmates, or society (Lee & Robbins, 1995).

Additionally, concerning the imposed pandemic measures and the detrimental effects of social isolation on both the general population and refugee and migrants mental health, it seems important to include feelings of social isolation when looking at the social context's importance and its possible protective role (Cacioppo & Hawkley, 2009; Elovainio et al., 2017; Holt-Lunstad et al., 2015; O'Connor & Nock, 2014; O'Connor et al., 2020; Rees & Fisher, 2020; Brooks et al., 2020; Hajjar & Abu-Sittah, 2021; Garrido et al., 2023).

Social well-being of refugees and migrants during COVID-19

Therefore, in the interest of identifying protective factors in refugee and migrant mental health, a study based on the ApartTogether data sets out to examine a combination of social well-being factors known to impact mental health, including migrants' and refugees' socioeconomic status, their social connectedness, and their feelings of social isolation.

Methods

The results described in this report are based on the global data collected through the Apart Together project, which was mentioned above (more information on the study design and procedure is described in Spiritus-Beerden et al., 2021; WHO, 2020). Among the sociodemographic questions respondents answered were age, gender, housing situation (i.e., living in a house or apartment, an asylum centre, a refugee camp, or on the street/in an insecure accommodation), and residence status (i.e., citizen, permanent documents, temporary documents, or no documents). The respondents' experiences of social connectedness with various members of their social network were measured using seven questions; on a scale from 0 to 2 (i.e., more, the same, or less), respondents were asked to indicate the experienced change in the level of social connectedness to their housemates, their relatives in this country, their friends in this country, their friends in other countries, their co-workers, and their neighbours. In addition, respondents were asked to indicate whether they felt socially isolated or not on a scale from 0 (not at all) to 10 (very). In addition, on a scale from 0 to 2, respondents were asked to say whether their mental health had worsened, stayed the same, or improved for 11 mental-health–related items. These eleven questions included substance use, such as alcohol and drugs, as well as feelings of depression, anxiety, worry, loneliness, anger, unpleasant recollections of prior traumatic events, physical reactions to stress, irritability, and hopelessness. Participants that withheld data for 13 of the 23 observations or more were excluded, leaving an analytical sample of N =19,788.

Analysing this data, we first looked at the sociodemographic characteristics of the respondents in relation to the considered social well-being variables in this study using descriptive statistics. Next, the factor structure for the included dimensions of social connectedness and mental health were tested using structural equation modelling.

Social well-being and mental health

First, cross tabulations were performed to analyse the differences in the reported decrease of the respondents' sense of connectedness between various housing conditions and residence statuses (Table 2 and Table 3). At first, there seemed to be no discernible differences between the three residence status groups in terms of the number of individuals who stated that their feelings of social closeness to others had deteriorated since the COVID-19 outbreak. Similarly, there appeared to be minimal distinctions between the various housing categories. However, it is noticeable that a higher percentage of respondents living in an asylum centre tend to indicate their feelings of connectedness to be worse on all items. Notably, 57.4% of survey participants residing in an asylum centre reported that their experiences of closeness with friends in their present country of residence had deteriorated in comparison to the pre-COVID-19 pandemic period. Furthermore, 51.5% of respondents indicated that their social connection with coworkers had also experienced a deterioration.

Additionally, nearly half (47.0%) of respondents who live on the streets or in unstable housing situations said that the coronavirus outbreak had made them feel less connected to their housemates[29]. Overall, between almost 40% and 50% of respondents who live on the streets or in unstable housing situations reported a decline in their social connectedness across all items.

Table 2. Percentage of respondents reporting a deterioration in their social connectedness in relation to residence status.

	Citizen	Permanent documents	Temporary documents	No documents
Housemates	20.6%	25.3%	23.4%	37.0%
Family this country	27.1%	28.9%	24.3%	34.0%
Family other countries	26.1%	29.5%	24.9%	32.9%
Friends this country	39.5%	43.3%	35.9%	43.1%
Friends other countries	27.3%	30.4%	24.5%	31.5%
Colleagues	35.3%	40.3%	32.5%	36.8%
Neighbours	29.3%	34.9%	29.1%	38.1%

Table 3. Percentage of respondents reporting a deterioration in their social connectedness in relation to housing situation.

	House	Asylum centre	Refugee camp	On the street/ Insecure housing
Housemates	23.0%	41.7%	27.6%	47.0%
Family this country	26.7%	45.0%	23.4%	41.8%
Family other countries	26.7%	38.5%	26.6%	39.4%
Friends this country	39.4%	57.4%	31.5%	43.2%
Friends other countries	27.2%	40.1%	25.3%	38.9%
Colleagues	35.3%	51.5%	34.9%	44.1%
Neighbours	30.3%	52.7%	33.6%	42.4%

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[29] We do not know who are considered housemates or roommates by respondents. Within this group, this can vary from other people who frequent a (night) shelter, previous housemates, other people using the same house or building to sleep in, etc.

Next, using factor analyses, three different social connectedness scales were identified for the seven items of social connectedness; (1) social connectedness with the wider circle (i.e., consisting of 'friends in this country', 'neighbours', and 'colleagues'); (2) social connectedness with the other country (i.e., consisting of 'family in other countries' and 'friends in other countries'); and (3) social connectedness with inner circle (i.e., consisting of 'housemates' and 'family in this country'); and two different scales were identified for the eleven mental health items; (1) anxiety and depression (i.e., depression, anxiety, worries, feelings of loneliness) and (2) hyper-arousal (i.e., anger, unpleasant reminders of past traumatic experiences, physical reactions to stress, feelings of irritation, hopelessness, sleeping problems, and substance use).

Following this, a structural equation model was used to understand the associations between socio-demographic and social well-being factors and the mental health outcomes. First, significant associations between social connectedness with the wider circle and the depression and anxiety scales[30] were found, meaning that respondents who indicated a better social connectedness to friends, neighbours, and colleagues than before the pandemic felt less negative impact on their feelings of depression and anxiety during the COVID-19 pandemic. This is consistent with earlier studies that show a beneficial association between living close to members of a social network and health status, stress reduction, life satisfaction, and fewer difficulties adjusting to a new environment (Ashida, Heaney, 2008; Taylor et al., 2020; Duru, Poyrazli, 2011).

Looking at the hyper-arousal scale[31], a significant association with all three scales of social connectedness was found. We can find support for these findings in numerous studies that have found that greater levels of social and familial support relate to reduced levels of psychological issues during all stages of forced migration (Porter & Haslam, 2005; Siriwardhana et al., 2014). Furthermore, previous research also supports the importance of maintaining contact with family and friends in one's home country, as the need to maintain one's culture, as well as the central role of family and ethnic peers, was found to be essential in protecting young refugees' psychological well-being (Behrendt, Lietaert & Derluyn, 2021).

Secondly, social isolation was significantly related to both the anxiety and depression scale and the hyper-arousal scale, supporting the prediction that the COVID-19 pandemic had a more negative effect on the mental health of those that reported feeling more socially isolated.

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[30] Includes feelings of anxiety, depression, loneliness, and worrying.

[31] Includes reminders of difficult experiences, physical reactions to stress, irritation, hopelessness, sleep problems, and substance use.

The findings of this study therefore imply that social connectedness and social isolation play an important role in mediating the influence of the COVID-19 pandemic on the mental health of refugees and migrants.

Last, it is important to mention that in an attempt to account for different inequalities, a number of socio-demographic characteristics, such as age, gender, housing situation, and residence status were taken into account. It was found that COVID-19 had a more detrimental influence on women's mental health outcomes than it did on males. Previous research already revealed that migrant and refugee women—particularly those in low-income countries—were predisposed to poor mental health outcomes. For example, for refugee women, a significantly higher likelihood of purchasing psychotropic drugs was reported compared to non-refugees (Hollander et al., 2011). Furthermore, multiple studies identified mental health risks for female asylum-seekers and refugees, such as a risk of suicide, psychosomatic complaints, chronic conditions, PTSD, and depression/anxiety (Carta et al., 2005; Gerritsen et al., 2006; Hollander et al., 2011). In addition to these pre-existing vulnerabilities, the pandemic exacerbates gender inequalities in health risks, with some harmful health consequences disproportionately affecting women (e.g., gender-based violence, drug development, mental health) (Vindegaard & Benros, 2020).

The findings in this latest ApartTogether study highlight a group of migrants and refugees who are most in danger regarding their mental health. In particular, it found that the COVID-19 pandemic severely worsened the mental health of people without documentation or with temporary residence status, as well as those who were homeless or living in insecure accommodations, or in asylum facilities, corroborating earlier findings of the unequal impact of COVID-19 on refugees' and migrants' mental health (Spiritus-Beerden et al., 2021).

Limitations

The findings need to be interpreted while considering following study limitations. First, the cross-sectional design renders it impossible to draw any conclusions about the causality between the included factors and the mental health outcomes; longitudinal studies can help address these causality questions. Second, despite continued and elaborated efforts to acquire a balanced sample containing an equivalent number of participants belonging to different demographic classifications (i.e., different residence statuses and different housing situations), the group of respondents in a more stable situation was overrepresented in the sample. Despite local enumerators and specific focus on these groups, this is likely the result of the online nature of the survey and COVID-19 restrictions. Last, to frame the migration situation of the respondents, the survey chose to differentiate between different levels of housing situation and residence status, which is why the survey does not allow us to compare refugees with migrants.

Implications

All these findings add to our understanding of crucial risk and protective factors regarding the impact of the COVID-19 pandemic on the mental health of migrants and refugees. Moreover, given the fact that this survey was distributed when the pandemic was happening in full force, as well as the sizeable sample size and its global reach, it contributes to the development of useful policy recommendations for the future.

Interventions aimed at mitigating the impact of the COVID-19 pandemic on the mental health of refugees and migrants must include strategies that increase social connectedness and interpersonal interactions. Since connectedness with the wider circle seems to have a substantial favourable effect, the need to cultivate a broader social network outside of close-knit friends and family to safeguard refugees' and migrants' mental health is emphasised by the findings of this study. However, seeing that the connections with one's cultural or ethnic communities, as well as links with the larger community in a host country are both vital, it is important to encompass both forms of community building when constructing appropriate and effective mental health interventions (Ziersch et al., 2020). In this regard, the target group needs to be encouraged to support one another, to keep or even strengthen relationships with the heritage community, and to foster engagement in the host culture (Walker et al., 2015). In addition, promoting migrant and ethnic minority health equity requires that the notion of cultural competency of professionals and services encompasses interpersonal interactions and community context (Garrido, García-Ramírez & Balcázar, 2019). Thus, supportive services should give migrants and refugees chances to network with both peers and volunteers in their local community.

To counteract the negative impact of social isolation on refugees' and migrants' mental health, pandemic preparedness interventions must provide them with chances to remain in contact with people within their social network, both within the country they are currently residing and in other countries. This can be facilitated by helping refugees and migrants set up (free) phone conversations or helping them to use (different types of) social media or other online platforms to help develop and maintain social connectedness, especially in periods of lockdown where offline contact is often limited or not possible (Grieve et al., 2013; Pancani et al., 2021).

In conclusion, this study adds to our knowledge of how the COVID-19 pandemic affects the mental health of migrants and refugees. It demonstrates how social interaction and the decrease of feelings of social isolation could improve mental health.

Key messages

- Interventions designed to alleviate the impact of the COVID-19 pandemic on the mental health of refugees and migrants should incorporate measures that promote social connectedness and interpersonal relationships.
- The above holds true in the broader community as well as in the host country. Therefore, mental health interventions should focus on and encompass diverse forms of interpersonal relationships.
- Contact with friends and family in other countries can be facilitated by assisting refugees and migrants in setting up (free) phone conversations or by helping them utilise (different types of) social media or other online platforms.
- Interventions should encourage inter-support, strengthen relationships with the heritage community, and foster engagement in the host culture.
- Supportive organisations and protective services should provide opportunities for refugees and migrants to engage with local volunteers and peers, thus promoting social integration and easing their sense of isolation.

Disclaimer

This report section is based on a scientific paper:

Spiritus-Beerden, E., Verelst, A., Devlieger, I., Botelho Guedes, F., Chiarenza, A., De Maesschalck, S., Durbeej, N., Garrido, R., Gaspar de Matos, M., Ioannidi, E., Langer Primdahl, N., Murphy, R., Oulahal, R., Padilla, B., Paloma, V., Sarkadi, A., Shehadeh, A., Sturm, G., van den Muijsenbergh, M., van Loenen, T., Vasilikou, K., Watters, C., Willems, S., Skovdal, M., & Derluyn, I. (2023). "Mental health of refugees and migrants during the COVID-19 pandemic: the protective role of social wellbeing" (Last revision).

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Acknowledgements

The authors would like to thank the ApartTogether consortium who participated or helped in the achievement of this study. Our gratitude also goes out to all translators and those who helped disseminate the study. In addition, we would like to thank the Global Programme on Health and Migration of the World Health Organisation to support and disseminate the survey worldwide. Last, we would like to profusely thank the respondents for their participation in the survey.

Funding: This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 101016233 and from the World Health Organisation.

Data Availability Statement: Data is not available due to sensitive and personal data.

Statement of Ethical Approval: The Ethics Committee of the Faculty of Psychology and Educational Sciences of Ghent University and the WHO Ethics Review Committee granted the approval for the entire project.

Competing interests: none declared

3.3 Mental health among marginalised groups, including persons experiencing homelessness and migrants in France during the pandemic

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Executive Summary

The COVID-19 pandemic affected the entire population, but it was the most disadvantaged groups who were hardest hit. Among them, people experiencing homelessness (PEH), including a large proportion of migrants, were impacted at different levels, including mental health, since the start of the pandemic. Our study investigated the mental health of PEH in France one year after the arousal of the COVID-19 pandemic. Our results highlight a persisting elevated proportion of mental health disorders, with one third of interviewees exhibiting symptoms of depression and anxiety. The most affected were women, unemployed, chronically ill, those feeling increased loneliness during the pandemic, and those reporting difficulties accessing healthcare.

Introduction

It has been established that the COVID-19 pandemic has widened health inequalities, with the most deprived populations being more affected (Bambra et al., 2020; Ku, Brantley, 2020). In this regard, PEH have been impacted to a larger extent than the general population (Crouzet et al., 2022). Furthermore, the precarious living conditions of both PEH and migrants are recognised to associate with deteriorated mental health (Foo et al., 2018; Guardia et al., 2017; Hossain et al., 2020; Laporte et al., 2018).

The ECHO study—Perceptions and impact of the COVID-19 outbreak among disadvantaged populations living in shelters—was implemented during the first lockdown in France in spring 2020. It aimed to describe the impact of the COVID-19 pandemic in persons experiencing homelessness. The design of this cross-sectional study relied on mixed-methods research methods, with both quantitative and qualitative methods. A second wave of the study, with similar methodology, was implemented in spring 2021 to assess longer term impact of the pandemic, and a potential feeling of weariness affecting compliance with prevention measures such as lockdown and curfew, or vaccine acceptance.

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In spring 2020, the first wave of data collection of the ECHO study observed 30% of PEH and migrants' participants with symptoms of moderate to severe depression in the early phase of the pandemic in France. In this sample, depressive symptoms were associated with being female (aOR: 2.15; CI: 1.26–3.69), single (aOR: 1.60; CI: 1.01–2.52), chronically ill (aOR: 2.32; CI: 1.43–3.78), facing food insecurity (aOR: 2.12; CI:1.40–3.22) and participants' region of origin (Scarlett et al., 2021).

After the first year of the pandemic, we hypothesised that the direct or perceived burden of the COVID-19, as well as associated preventative measures, could have worsened PEH and migrants' mental health. The objective of this study is therefore to assess the prevalence of depressive symptoms, as well as associated factors, among the PEH population living either in shelters or in the street in France during spring 2021.

Methods

Study design

The ECHO wave 2 cross-sectional study was performed between March 9, 2021 and June 25, 2021 in the French metropolitan regions of Paris and Lyon, as part of the broader ECHO study (Longchamps et al., 2021). The study sample consisted of persons aged over 18 years experiencing housing instability. Participants were recruited from homeless shelters and day centres, with day centres defined as centres welcoming PEH from a few minutes up to a maximum of one day. Participating centres were selected using purposive and convenience sampling methods (Andrade, 2021). Study interviews were conducted face-to-face by trained interviewers, assisted where necessary, by telephone interpreters. Approximately 20 different languages were employed, aside from French and English, the most frequent of which were Arabic, Pashto, and Dari. The study protocol was approved by the Ethical Research Committee of the University of Paris (CER-2020-41).

Data analysis

The main outcome—mental health—was assessed using the Patient Health Questionnaire four-item PHQ-4 (cut-off score 5), a brief screening scale for depression and anxiety (Löwe et al., 2010).

We used univariate logistic regression analysis to identify factors associated with depressive symptoms; statistically significant variables at $p < .20$ were included in the multivariate logistic regression model (Bursac et al., 2008). Missing covariate values were imputed using Multivariate Imputation by Chained Equations (MICE) (Buuren and Groothuis-Oudshoorn, 2011). All data analyses were performed using R Version 4.1.1.

Results

The study sample was recruited from 22 centres, where 635 persons were approached, of whom 521 (82.0%) agreed to participate. Among these participants, 99.6% (519) complete cases were included in the imputed adjusted analyses.

Table 1 presents the sample characteristics. Briefly, participants were mainly men (69.5%), aged 30–49 years (45.9%), born abroad (87.9%), mostly from a Sub-Saharan country (40.7%), single (61.2%), without children (45.7%), with an average level of education (primary/high school 52.4%). One third of the respondents were sleeping rough at the time of the survey (day centres, 32.6%), and 41.6% were undocumented. Regarding health, 13.6% had no health insurance coverage, half suffered from a chronic disease (50.6%), 21.3% reported having difficulties accessing healthcare during the pandemic, 40.7% reported increased loneliness during the pandemic, and one third declared symptoms of depression (30.1%).

Table 1. Characteristics of ECHO study participants, France, wave 2, Spring 2021 (n =521; %)

		Wave 2
		% (n)
Sex		
	Man	69.5% (362)
	Woman	30.3% (158)
Age		
	18–29 years	25% (130)
	30–49 years	45.9% (239)
	50+ years	28.4% (148)
Region of birth		
	France	12.1% (63)
	Europe (excl. France)	9.2% (48)
	North Africa	17.9% (93)
	Rest of Africa	40.7% (212)
	Eastern Mediterranean	15.5% (81)
	Others	4.6% (24)
Relationship		
	No	61.2% (319)
	Yes	30.3% (158)
Having children		

	No	45.7% (238)
	Yes, not living with them	37.2% (194)
	Yes, living with them	16.3% (85)
French-language aptitude		
	Low	18.4% (96)
	Average	29.6% (154)
	High	51.4% (268)
Highest educational level reached		
	Up to primary school	20.9% (109)
	Primary/High school	52.4% (273)
	After High school	25.7% (134)
Administrative status		
	French	12.1% (63)
	Asylum seeker	6.3% (33)
	Residence permit	33.8% (176)
	Undocumented	41.5% (216)
	Other	6% (31)
Duration of stay in France		
	<1 year	22.5% (117)
	1 to <3 years	19.8% (103)
	3 to <5 years	13.1% (68)
	5+ years	43.2% (225)
Type of centre		
	Longer stay shelter	67.4% (351)
	Day/night centre	32.6% (170)
Employment status before the pandemic		
	Employed	18.2% (95)
	Unemployed	80.4% (419)
Difficulties to access food during the pandemic		
	No	39.2% (204)
	Yes	59.5% (310)
Trust in official COVID-19 information		
	No	38.6% (201)
	Yes	60.8% (317)
Health literacy – Navigating in the healthcare system		
	Low	20.7% (108)
	High	39% (203)

Health literacy – Social support for health		
	Low	24.2% (126)
	High	36.5% (190)
Health insurance coverage		
	None	13.6% (71)
	Yes	85.4% (445)
Chronic disease		
	No	47.6% (248)
	Yes	50.3% (262)
Depressive symptoms		
	No	58% (302)
	Yes	30.1% (157)
Increase in loneliness during the pandemic		
	No	57.6% (300)
	Yes	40.7% (212)
Difficulties accessing healthcare during the pandemic		
	No	76.4% (398)
	Yes	21.3% (111)

Characteristics associated with depressive symptoms assessed via multivariate regression models are shown in Table 2. Depression associated with being a woman (aOR: 2.15 [1.29-3.59]), unemployed (aOR: 2.25; CI: 1.18–4.32), chronically ill (aOR: 2.23; CI: 1.4–3.56), increased loneliness during the pandemic (aOR: 2.46; CI: 1.60–3.68), and having difficulties accessing healthcare (aOR: 1.7; CI: 1.02–2.84). Reduced rates of depression were observed among participants born in other European countries compared to those born in France (aOR: 0.06; CI: 0.01–0.3), and among those reporting a higher level of social support (as a component of health literacy skills) (aOR: 0.49; CI: 0.31–0.77).

Table 2. Characteristics associated with depressive symptoms, ECHO study, France, Spring 2021 (n = 519; multivariate logistic regression models, OR, 95% CI)

	Depression	
	OR [95% CI]	p value
Sex		
Woman	Ref.	
Man	0.46 [0.28-0.77]	0.003

Parentality		
No children	Ref.	
Yes, living with them	0.91 [0.46–1.84]	0.802
Yes, not living with them	0.71 [0.43–1.17]	0.180
Employment during the pandemic		
Employed	Ref.	
Unemployed	2.25 [1.18–4.32]	0.014
Difficulties to access food		
No	Ref.	
Yes	1.28 [0.81–2.03]	0.294
Type of centre		
Longer term shelter	Ref.	
Day centre	1.46 [0.9–2.38]	0.127
Region of birth		
France	Ref.	
Africa	0.84 [0.42–1.7]	0.635
Eastern Mediterranean	1.14 [0.51–2.52]	0.755
Europe	0.06 [0.01–0.3]	0.001
North Africa	0.6 [0.27–1.33]	0.209
Other	0.65 [0.18–2.29]	0.502
Increase in loneliness		
Yes	Ref.	
No	0.41 [0.26–0.63]	<0.001
Health literacy (social support)		
Low	Ref.	
High	0.49 [0.31–0.77]	0.002
Chronic disease		
No	Ref.	
Yes	2.23 [1.4–3.56]	0.001
Difficulty to access healthcare		
No	Ref.	
Yes	1.7 [1.02–2.84]	0.041

	Depression	
	OR [95% CI]	p value
Sex		

Men	Ref.	
Women	2.15 [1.29–3.59]	0.003
Parentality		
No children	Ref.	
Yes, living with them	0.91 [0.46–1.84]	0.802
Yes, not living with them	0.71 [0.43–1.17]	0.180
Employment during the pandemic		
Employed	Ref.	
Unemployed	2.25 [1.18–4.32]	0.014
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Health literacy (social support)		
Low	Ref.	
High	0.49 [0.31–0.77]	0.002
Chronic disease		
No	Ref.	
Yes	2.23 [1.40–3.56]	0.001
Difficulty to access healthcare		
No	Ref.	
Yes	1.7 [1.02–2.84]	0.041

Discussion

Main results

After one year of COVID-19 pandemic, lockdown, curfew, and other preventative measures, as well as overwhelming flows of (mis-/dis-) information, within the ECHO study wave 2, 30.1% of PEH and migrants living in accommodation centres or on the street exhibited depressive symptoms. Associated risk factors included being a woman, unemployed, chronically ill, feeling increased loneliness during the pandemic, and reporting difficulties accessing healthcare.

Limitations and strengths

As far as we know this is the only study that evaluated mental health in PEH and migrants both at early and later stages of the COVID-19 pandemic in France. Another asset of our study is the use of face-to-face interviews as well as 24/7 telephone interpreters, which favoured the inclusion of participants with low French-language aptitude and/or possibly low health literacy skills, as well as those who wouldn't have had access to an internet connection. Consequently, our results—although not based on a probabilistic sampling—depict the situation of a large set of profiles within PEH, therefore representing a solid foundation for public health interventions.

Nevertheless, the study doesn't come without limitations. Firstly, regarding the sampling strategy, our study sample is not representative of the entire PEH population in France, limiting extrapolation of the findings. In addition, our study is cross-sectional, preventing interpretation of trends in depressive symptoms over time. Furthermore, different questionnaires were carried out depending on the study wave to assess mental health; i.e*.,* the nine-item Patient Health Questionnaire (PHQ-9) was used in wave 1, albeit PHQ-4 was used in the current study, i.e., wave 2. The latter was adopted to reduce administration time and improve acceptability. However, comparisons between scales should remain, as both PHQ-9 and PHQ-4 are validated tools for assessing depression and anxiety.

Comparison to the literature

Although the context has changed between the beginning of the pandemic and one year later, the prevalence of depression in PEH seems to have remained at a high level—around one third of participants. This is twice that of the French general population in 2021 (at 12.5% of 18–85 year old persons (Léon et al., 2023)). Comparisons with pre-pandemic prevalence in PEH and migrants requires caution, as figures vary greatly depending on data collection methods, with estimated rates of depression being either lower or higher (Scarlett et al., 2021).

These differences may result from the variety of situations; e.g., housing or general living conditions (Ramiz et al., 2021), and prior illness—an established risk factor for depression (Chandola et al., 2020).

As in 2020, and again in 2021, reduced depression was associated with migrating from Europe compared to French natives (aOR =0.06, CI:0.01–0.30). This is unexpected, as depression has been shown in precedent studies to be more prevalent among immigrants than in natives (Aldridge et al., 2018). Higher levels of social support in health, as a component of health literacy competency, are also associated with reduced depression (aOR: 0.49; CI: 0.31–0.77). This may suggest the role of social support in alleviating the effect of loneliness and anxiety as a result of the COVID-19 pandemic and related preventative measures; lockdowns in particular.

Our results—similar to those in 2020—show that women had twice the risk of depression as men (aOR: 2.15 [1.29–3.59]). This association is consistent with previous literature in France (Fond et al., 2019). Depression was found in our sample to be associated with being chronically ill, which is in line with other studies (Wu et al., 2021). This result raises concerns for those without proper medical insurance coverage, who comprise a large portion of PEH and migrants. Finally, in spring 2020, in the context of isolation due to first lockdown, increased loneliness has been highlighted in PEH, as hypothesised (Bertram et al., 2021; Scarlett et al., 2021). Notably, our current results show that loneliness is still associated with higher rates of depression in 2021, despite national preventative strategies having been scaled back.

Conclusion

About one third of the interviewed PEH exhibited depressive symptoms in France in 2021. The most affected being women, chronically ill individuals, and those reporting feelings of increased loneliness. Ultimately, identifying the risk factors for depression in PEH and migrants could help mitigate the impact of similar crises and related preventative measures. These results—one year after the arousal of COVID-19 pandemic—highlight the persistence of social inequalities regarding depression, which affects marginalised groups such as PEH and migrants. A better understanding of how these inequalities develop and are maintained is necessary to limit the impact of future similar crises. However, these results represent a solid foundation for targeted mental health prevention interventions in PEH and migrants.

Disclaimer

This report section is based on a scientific paper:

Ducarroz, S., Scarlett, H., Davisse-Paturet, C., Melchior, M., Mental health amongst marginalised groups, including persons experiencing homelessness and migrants, in France during the COVID-19 pandemic (submitted to the *Journal of Affective Disorders Reports*, August 2023).

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4. How did policies generate different kinds of health inequalities?

4. How did policies generate different kinds of health inequalities and what can be done about this problem?

The COVID-19 pandemic has had a profound impact on various facets of life, directly impacting a staggering number of over 767.9 million individuals (SARS-CoV-2–confirmed cases) and causing the loss of over 6.9 million lives according to some estimates (WHO Coronavirus (COVID-19) Dashboard). However, its repercussions have reverberated directly or indirectly throughout communities and societies, disrupting them in numerous ways. Beyond considerations related to morbidity and mortality induced by SARS-CoV-2 infection, this pandemic had also had major negative socioeconomic and psycho-social impacts (Rezapour et al., 2021; Dubey et al., 2020). Forsythe et al. estimated that only in the year 2020, managing the COVID-19 pandemic came at a cost of approximately $77 billion to $2.7 trillion (Forsythe, 2020).

Combining different research activities, the PERISCOPE project's objective focused precisely on investigating the direct and indirect impacts of COVID-19 and how to respond with sustainable policies and technologies. In the framework of the work package on mental health and health inequalities, several deliverables have examined in depth the relationship between health inequalities, mental health, and vulnerable groups. The *Interim Report* led by FEAM—whose findings have been summarised in the introduction—for example, clearly stated that "COVID-19 has been shown to exacerbate existing inequalities in chronic diseases and the social determinants of health. In this regard, vulnerable groups such as migrants and minority ethnic groups or homeless people, are more likely to be exposed to COVID-19 infection, but also to face greater difficulties in accessing healthcare, including access to mental health support and care, and COVID-19 vaccine" (PERISCOPE, 2021: 95). Building on literature analyses and the recognition of material obstacles that might jeopardise access to mental health support and care, treatment and follow-up, light has been shed on how policies can mitigate the direct and indirect effects these healthcare weaknesses can generate and, in some cases, eliminate them.

In this regard, the different chapters presented in this report are aimed at creating a bridge between evidence obtained on mental health in vulnerable groups, and the policy interventions that might increase the well-being of the people belonging to these groups. Nevertheless, the opposite may also happen, and policies might *generate* different kinds of health inequalities if they are not tailored accordingly. In this regard, it is important to develop policies based on informed decisions, using reliable and relevant information, to mitigate health inequalities that already exist in our society. But how can policies generate health inequalities? And how can we avoid this outcome?

Policies, from mitigation to the generation of health inequalities

The interplay of different kinds of policies—socioeconomic, healthcare, environmental, among others—have significant implications for health outcomes. If they can improve the conditions and the well-being of their recipients, they also can be inadvertently counterproductive and generate deeper health inequalities.

Social and economic policies related to income distribution, education, employment, and social welfare on the one hand, and others that encompass areas such as housing, food security, and social support systems on the other hand, play a crucial role in shaping various aspects of society, including health outcomes. For instance, limited access to quality education or scarce employment opportunities for certain populations may contribute to higher levels of poverty and ultimately result in poorer health. However, there are methodological challenges in assessing the different types of evidence on the social determinants of health inequalities and controversies in interpretation remain to be resolved (ALLEA, FEAM, 2021).

When these policies are designed in a way that creates unequal access to resources and opportunities, it can lead to health disparities among different groups. Moreover, the lack of social support networks and community resources in certain areas can contribute to health disparities among different groups. The chapter *Mental health of refugees and migrants during the COVID-19 pandemic: the protective role of social well-being* (section 3.2) of this report addresses the mental health challenges faced by refugees and migrants due to the COVID-19 pandemic, and has discussed and expanded upon how policy interventions should promote and focus on enhancing social connectedness and interpersonal interactions. In this regard, it has been observed that establishing connections with a broader social network beyond one's immediate family and close friends can significantly improve refugees and migrants' mental well-being. Therefore, it is essential to cultivate strategies that promote a wider sense of community and support for the mental health of refugees and migrants.

Adverse consequences of new policy implementation, even if inadvertent, must be clarified and taken into account when assessing and deciding on policy 'trade-offs'. For example, during the acute phase of the COVID-19 pandemic, the introduction of lockdowns in many EU Member States as part of social distancing measures decreased social interconnectedness with potential adverse consequences for vulnerable groups. How should the adverse mental health consequences of those who are already vulnerable be balanced against the desired beneficial consequences of reduced transmission of COVID-19 in the general population?

Healthcare policies themselves also play a significant role in generating health inequalities. Access to healthcare services, their affordability, and the overall quality of care are crucial factors—not only during a crisis. During the COVID-19 pandemic, several population groups were discriminated against regarding access to health services. Beyond specific groups like refugees, migrants and PEH, on which this report has shed some light, women have been globally penalised. Pregnant women, for example, experienced a higher risk of maternal mortality, particularly in specific regions of the world: "Expectant mothers had to balance the fear of COVID-19 with the uncertainty of whether they could safely deliver their babies in a health facility, and too many did not receive the care they needed in time" (PAHO, 2022). For their part, elderly people were also highly impacted by restricted access to healthcare. As we read from the key-findings of the report on *COVID-19 and older people: Impact on their lives, support and care*, "the unavailability of services and fear of catching the virus were dominant reasons for unmet healthcare needs. Subsequently, reasons already common before the pandemic, such as waiting lists, lack of reachability and unaffordability, increased. There was a shift from formal to informal long-term care and from residential care to home care. There was an increase among men aged 50–64 providing informal care, but it remains particularly common for older women to provide such care. Many informal carers provided more care, with additional pandemic-related challenges" (EUROFOUND, 2022: 2). In addition to clarifying the consequences of the uncertainties created by variabilities in health and social service provision, there may also be very complex effects emerging within the relative distribution of different mental disorders (see Box 3) that require longer-term assessment.

Box 3: "Hospitalised psychopathologies in children and adolescents"[33] (Serbanescu & Diaconu, 2023).

Attention deficit with hyperactivity (ADHD); conduct disorders; emotional disorders; autism spectrum disorders (ASD), including Asperger syndrome; and eating disorders (anorexia nervosa and bulimia) were analysed in correlation with the containment measures.

In 2022, the hospitalisations for several disorders in children and adolescents decreased (anxious disorders, autism spectrum disorders, eating disorders) compared to 2021. Hospitalisations for ADHD and conduct disorders were not affected by COVID-19 restrictions or relaxations, showing very similar rates over five years.

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[33] This box was authored by Maria Serbanescu & Carmen Diaconu, Stefan S. Nicolau Institute of Virology (IVN). It is part of a broader study "COVID-19 impact on mental health with a specific focus on the access to and consumption of mental healthcare services in Romania", available at https://ki.se/en/gph/periscope-a-pan-european-response-to-the-impacts-of-covid-19-and-future-pandemics-and-epidemics.

Instead, an increased hospitalisation rate was observed for all other analysed disorders: emotional disorders, anxious disorders, ASD, and eating disorders compared to the pre-pandemic years. Hospitalisations for emotional disorders, eating disorders, anxiety, and autism spectrum disorders increased threefold in 2021 comparing to pre-pandemic years, showing the impact of closing outpatient services for autistic children from 2020–2021 and the effect of normalising the activity within specialised centres that employ various strategies and interventions to support and promote social interaction for children with ASD (2022).

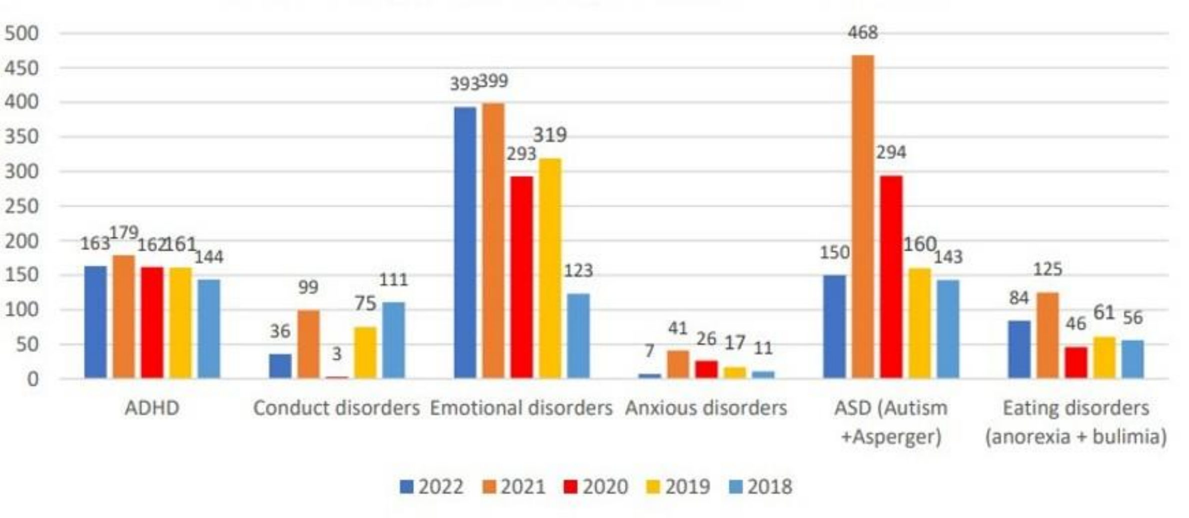

Figure 4. Hospitalised psychopathology in children and adolescents in the years 2020-2022 compared to the years 2019 and 2018.

If certain populations face barriers in accessing healthcare services, it can lead to disparities in health outcomes, including mental health. The case study on the UK led by the LSE highlighted how adverse mental health outcomes—intensified since the pandemic—due to socioeconomic conditions must be addressed as a social justice issue. Additionally, inadequate healthcare infrastructure and resources in specific areas can further exacerbate the problem of unequal access to quality care. For this reason, as the LSE underlines, it is important to foster "targeted, sustainable investment in mental health and related care services (elder care, childcare, adult social care), particularly responsive formal and informal community-based care".

Environmental policies related to the environment, urban planning, and transportation are another important element to consider regarding health inequalities, in particular during the last few decades with the emerging One Health Approach. Defined by the WHO as an "an integrated, unifying approach to balance and optimise the health of people, animals, and the environment" (WHO, 2017), the One Health approach highlights the interconnectedness and interdependence of these three dimensions, where any disruption or imbalance can potentially lead to significant repercussions in the others. In this sense, health inequalities might be exacerbated by non-comprehensive environmental policies; i.e., policies which target a single aspect of a problem and do not consider different dimensions and the potential and interconnected consequences, stakeholders, or implications of environmental issues. For instance, disparities in access to clean air, clean water, and safe neighbourhoods can contribute to health inequalities. Often, low-income communities—a group that may be considered 'vulnerable'—face greater exposure to environmental hazards, which can result in higher rates of respiratory illnesses, toxic exposures, and other health problems.

Finally, discriminatory policies and regulations that unfairly target certain population groups on the basis of factors like ethnicity, religion, sexual orientation and gender, migration status, age, or disability can also perpetuate health inequalities and exacerbate discrimination. In this sense, 'visitors' policies' that have been implemented during COVID-19 to restrict visitors in long-term care facilities have sometimes caused these controversial effects and have "negatively affect[ed] the physical and mental health and well-being of residents. Older people, especially those in isolation and those with cognitive decline, dementia, and those who are highly care-dependent, may become more anxious, angry, and withdrawn during the outbreak or while in isolation" (UNDESA, 2020). Consequently, these policies need to balance between safeguarding the well-being of elderly residents and fulfilling their desire for family and social interaction in order to avoid poorer health outcomes.

As the chapter focusing on the *Impacts of regulations on migrants with psychosocial disabilities and mental health problems* highlighted, policies should be more comprehensive, without isolating a specific social factor but addressing multiple and intersecting forms of discrimination at the same time. Nevertheless, the implementation of intersectional strategies in tailored public policies is still delicate and ongoing work.

In a previous work conducted before the outbreak of the COVID-19 pandemic, the European Federation of Academies of Sciences and Humanities (ALLEA) and FEAM explored some of the issues and opportunities for interlinking policies for migration and for health. In their joint *Statement on Migration and Health*, for example, they advocated for better access to healthcare services, including reinforced provision of mental health services. It was also noted in that earlier work that interlinkage can also draw on a shared evidence base; for example, by communicating research findings that showed that migrants did not usually pose threats to the health of EU citizens (ALLEA, FEAM, 2020).

The focus of our report has been on health inequalities during the pandemic. However, it must also be recognised that new health inequalities may be introduced by policies for post-pandemic economic recovery if fiscal stimulus initiatives do not take into account potentially adverse impacts on vulnerable groups. This additional health inequality is analogous to the introduction of additional adverse environmental effects when post-pandemic fiscal stimulus policies do not incorporate sustainability criteria.

In conclusion, even policies that might not seem directly related to the healthcare sector can result in health inequalities for marginalised and disadvantaged groups. Addressing these issues and promoting more equitable and integrated policies is essential to reduce health disparities and create a healthier and more just society for everyone. This requires better use of evidence in policymaking, coupled with a commitment prior to implementation to measure the impact of interventions and the involvement of user communities in developing and implementing interventions and monitoring impacts.

Nevertheless, another delicate point is to define vulnerable individuals and groups, particularly in public policies.

Defining 'vulnerability' in public policies

By definition, public policies tend to target the average recipient groups to whom they are addressed. This is true for several kinds of social policies dealing with vulnerable groups and individuals[34], but the definition of the state of vulnerability is often hard to describe. Literature on this topic tends to identify two main categories that merit consideration when dealing with the definition of 'vulnerability' in public policies.

The first category involves the individual's personal characteristics, i.e., education, ethnicity, gender identity, or age, among others. It is important to acknowledge that even still sizeable less-educated or unemployed groups maintain substantial health and mortality disadvantages and may be considered vulnerable groups. Thus, the vulnerable group concept may refer to both the marginalised very small groups and massive groups having important influence on national health indicators.

The second category pertains to the broader, external and situational circumstances in which individuals and groups live, find themselves, and act. These two categories are interconnected and complicate defining 'vulnerability' as a fixed condition. On the contrary, this 'dynamic' condition implies that individuals may be vulnerable in specific situations but not in others, and

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[34] In this regard, a similar discussion was undertaken recently regarding the definition of "consumer vulnerability" in EU consumer policy at the EU level. The analysis made in this field can help to shed light on this controversial definition even in health policies. See: EC, 2016; BEUC 2021; Šajn, 2021.

the level of vulnerability can vary among different individuals, including different individuals within the same group.

For example, public policies addressed to protect refugee and migrant populations will address the main problems that affect this population, as *average* vulnerable groups. Nevertheless, the refugee and migrant populations are heterogenous groups. Among this vulnerable population, internal vulnerabilities will characterise each of the members: women, children, people with disabilities, people who suffered from social stigma, and the elderly, among others. If policies don't take into account the internal differences of the population, the "minorities within minorities" (Eisenberg, Spinner Halev, 2006), inequalities will be reproduced. In the field of healthcare, health inequalities might increase if public policies don't target vulnerabilities in their heterogeneity. Nevertheless, targeting vulnerabilities in their heterogeneity is not a simple task. In fact, it is important to acknowledge that policymakers sometimes operate with limited resources and need to fulfil criteria prioritising one issue over another. This becomes especially relevant when addressing various diversities within a given context, as it could potentially be more cost-effective and less complicated to address the 'average' scenario. While a definitive solution to this dilemma might not be readily apparent, underscoring this challenge could offer valuable insight for the generation of good practices.

It is also important to distinguish between vulnerability and exposure[35]. Exposure describes how close an individual (or population) is to the hazard, whereas vulnerability represents the degree of susceptibility to being harmed by the hazard event. Both need to be considered to understand risk and the health impact (see Figure 1).

In this purpose, the case of the healthcare workers explored in section 2.1 is emblematic, albeit complex. With the advent of the pandemic, this group was affected by a mix of factors which made this population, already identified as 'vulnerable' by pre-pandemic studies (Dyrbye et al., 2014)[36] and even more vulnerable during the pandemic: it was impacted by a higher risk of COVID-19 exposure, leading to fear and anxiety, and by the consequences of the pandemic on their training opportunities and mental health.

Nonetheless, it is still important to question whether it the greater prevalence and the effects of COVID-19 in healthcare workers was only a result of increased exposure to the virus, or whether they could they be regarded as vulnerable for other reasons (e.g., socio-economic status and other social factors as gender, ethnicity, disability status, among others).

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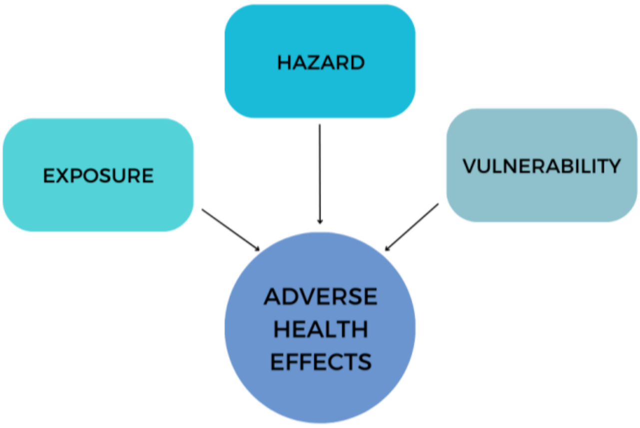
[35] To explore further this point, see: Diderichsen, 2012.

[36] See Dyrbye et al., 2014. In fact, even before the pandemic "resident doctors were identified as a group with higher vulnerability compared to the general population. Training period appeared to be the topmost career stage for distress and burnout among physicians, and medical residents were significantly more affected by depression symptoms than the population control" (Section 2.1 of this report).

Figure 1.



Toward a comprehensive and integrated approach to mental health in public policies

During COVID-19 pandemic, access to mental health support and care has been difficult for the general population; particularly so for vulnerable populations. As we have seen, healthcare professionals (HCP), migrants, refugees, and unhoused individuals have experienced major constraints in accessing facilities, while being more and more exposed to stress, anxiety, and depression. In the UK, high costs of living—due to COVID-19, Brexit, and the war in Ukraine—have intensified and generated new forms of inequalities, particularly affecting younger people and lower-income earners. The necessity of providing more comprehensive policies taking into account mental health and health inequalities is urgent.

The European Commission recently issued communication outlining a comprehensive approach to mental health (EC, 2023). This approach particularly recognises the influence of psychological and various social factors. The communication emphasises the importance of implementing policies in different sectors, including education, the environment, employment, and social protection, to enhance mental health and resilience. It also acknowledges that social inequalities can contribute to poor mental health, highlighting the need to promote equality as a preventive measure. Furthermore, the communication addresses the impact of digital services on mental health and highlights the efforts of the Digital Services Act (DSA)[37] in dealing with related risks.

Nevertheless, this communication has been criticised for putting too much emphasis on "the need to strengthen biomedical research and efforts in this area, despite the fact that this type

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[37] See https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package.

of approach has proven to be limited and ineffective" (MHE, 2023: 2), and for neglecting the mental health of some *new* vulnerable groups from its program and initiatives: healthcare professionals[38], a vulnerable category who has experienced different kinds of challenges since the beginning of the pandemic, from workforce shortages to aggression, leading to declining mental health—a worrying situation already highlighted by FEAM (FEAM, 2020)[39] and WHO (WHO, 2022)[40]. This specific example serves to exemplify the idea of emerging vulnerabilities and inequalities that can subsequently be extended to encompass other susceptible vulnerable populations. Preventive measures and a supportive work environment are essential to address these concerns. Nevertheless, this might pose a challenge for policymakers. If making policy recommendations may seem relatively straightforward, the real challenge lies in successfully implementing them. To achieve effective implementation, it is crucial to establish mechanisms that enable seamless collaboration with local partners, such as local authorities and community groups. However, while doing so, it is equally important to retain the essential attributes of the particular recommendation, e.g., action across sectors. Coordination among actors involved is still challenging, but the adoption of a comprehensive approach to mental health in policies should be prioritised, since "the cost of non-action on mental health is already significant and unfortunately, it is forecasted to rise even more, in line with global stressors" (EC, 2023b: 1).

As we have seen from the chapters of this report, it is important to recognise that health inequalities are complex and arise from a combination of factors, including social, economic, and political determinants. In the *Health Inequalities Research. New Methods, Better Insights*, published by ALLEA and FEAM in November 2021, it was pointed out how health inequalities among people with lower socio-economic status and the challenges they pose for public policy. In this report, three main questions were identified as still posing concerns: (1) the extent to which health inequalities are caused by differences in education, occupation, or income; (2) the relative importance of specific factors in the relationship between these socio-economic factors and health; and (3) the effectiveness of interventions and policies to reduce health inequalities.

Without denying the importance of conventional methods to produce robust policy options, the report suggests that new research methods—for example, 'counterfactual' approaches to

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[38] See https://www.euractiv.com/section/health-consumers/news/healthworkers-mental-well-being-needs-more-attention-meps-say/.

[39] In this regard, see also FEAM's publications: FEAM, *Protecting medical personnel from COVID-19*, April 2020, and FEAM, *Vaccinate medical staff to ensure an effective campaign against COVID-19*, January 2021, both available (respectively) at https://www.feam.eu/wp-content/uploads/FEAM-statement-Protection-COVID-19-7-April-2020.pdf and https://www.feam.eu/wp-content/uploads/FEAM-statement-COVID-19-vaccination-campaign-070121-final.pdf.

[40] See Ticking timebomb: Without immediate action, health and care workforce gaps in the European Region could spell disaster (who.int), 2022.

causal inference, advanced mediation and moderation analysis, and quasi-experimental methods—can enhance our understanding of health inequalities and inform effective policies and interventions. Section 2.2 of this report, led by the LSE, also highlighted how "anthropological ethnographic and participatory methods can play an important role in understanding, managing and preventing mental health outcomes of social inequality". Despite the need for further research, there is already sufficient evidence to support interventions and policies to tackle health inequalities. Their implementation should be accompanied by rigorous evaluation efforts, requiring a stronger commitment to evaluation from policymakers and researchers, and involving the communities concerned. Addressing health inequalities requires informed, comprehensive, and integrated policies that promote equality and tackle the underlying social determinants of health, at different governance scales—from the global to the local level. In particular, the relationship between global and local levels should be taken into account and strengthened, precisely because COVID-19 has revealed the weakness of local services in dealing with and managing local populations, and also because COVID-19, like other infectious diseases, does not respect geographical or political boundaries. Beyond these general considerations, mental health needs to be supported and upscaled according to its specificity: for example, it could benefit from community-based services, specifically for mental health. Moreover, mental health must find its transversal place in policy recommendations since, of course, it is part of a more general conception of health. Physical health and mental health should be thought of as a *continuum* and in constant interdependence.

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5. Policy recommendations

The recommendations listed below, organised through a thematic classification, are the result of each partner's research and represent a consensus among participants. They were first discussed during an online preparatory workshop, held on January 18, 2023. The insights gathered during the first workshop were used to further develop a policy-driven discussion during a follow-up online meeting, held on March 29, 2023, and involving PERISCOPE partners and FEAM experts. During this workshop, PERISCOPE partners presented their ongoing research and received feedback.

Based on the discussions, PowerPoint presentations and inputs offered by participants, FEAM prepared and circulated a first draft of the policy recommendations. Subsequent edits have been made thanks to the additional feedback, resulting in an updated document (Appendix 1). In accordance with this document and the gathered evidence all along this report, this set of policy recommendations has been organised along four main thematic clusters, listed and discussed below. A general preamble contextualises the main thematic area, followed by specific recommendations.

Before presenting our results, it must be noted that tackling specific recommendations depends on addressing the overarching, broader challenges for health and society. Moreover, it cannot be neglected that different recommendations may need to be addressed and implemented at different, interconnected, levels—global, regional, EU, national and local—and according to different terms—long, medium, and short.

In this sense, the *World mental health report: transforming mental health for all* (WHO, 2022) provides already a comprehensive account for a mental health strategy. Among others, a valuable contribution is a concrete context for action on priority pathways to transformation that can be applied to pandemics and other determinants of inequality, particularly by addressing the necessity for:

1. a major investment in mental health, both in terms of funding resources as well as the adoption of evidence-based policies;
2. the reconfiguration of the environment that influences mental health;
3. strengthening care by changing the circumstances—people, modalities, infrastructure, timing—in which mental health care is delivered and received.

In any forthcoming evaluation, it would be worthwhile to investigate the correlation between the three WHO transformative pathways and the various thematic clusters listed below. Our results have been condensed as follows:

1. Improving general health data collection on mental health

The pandemic has revealed how important and necessary it is to improve the production, availability, and sharing of health data and to sustain data infrastructures and monitoring toward effective investments. It has been underlined how "collecting and combining health data is fundamental for the advancement of medical research, reducing health inequalities, and improving disease diagnosis and treatment" (ALLEA, EASAC & FEAM, 2021)[41]. International data sharing, among EU countries and between EU countries and non-EU countries, is essential for international collaborative research to empower citizens to electronically access their medical records across borders[42] and generate good policy responses. In this regard, it is relevant that active Member State involvement in the European Centre for Disease Prevention and Control (ECDC) and the Health Emergency Preparedness and Response (HERA) enables and ensures the collection of comparable data and its use in policy and practice[43]. Particularly in times of pandemics, it is important to standardise methods in the production of health data and to ensure that every country collects sufficient, reliable, and internationally comparable data of the various types needed in a timely manner. With the advent of pandemic, mental health has gained important visibility, because of the harmful effects the pandemic provoked on the general population, particularly for vulnerable groups. In improving general health data collection and specifically mental health data collection, attention should focus on:

- Evaluating mental health impacts over longer-term follow-ups of the pandemic and of patients with long COVID to augment and clarify implications of the mental health data that has been collected during the acute phase of the pandemic.
- Collecting statistics on access to healthcare systems both for migrants and the native-born population.
- Standardising definitions and methods to collect ethnicity and migration status in all health-related studies in the EU.
- Advancing methodology to collect and measure health inequalities and their determinants (for example, by using the 'counterfactual' approaches to causal inference or consulting affected communities to improve data collection).

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[41] See: https://www.feam.eu/wp-content/uploads/International-Health-Data-Transfer_2021_web.pdf.

[42] See: https://www.feam.eu/wp-content/uploads/Position-Paper-on-the-European-Health-Data-Space.pdf.

[43] See FEAM's work on HERA: *A stronger crisis preparedness*: https://www.feam.eu/a-stronger-crisis-preparedness-the-european-health-emergency-response-authority-hera-summary-report-now-available/.

2. Addressing health inequalities and their impact on mental health

Measuring health inequalities, which are caused by an interconnection of social, economic, and political factors, has been prioritised over the last three years. The pandemic acted as a catalyst, revealing the importance of addressing, mitigating, and overcoming these inequalities, which sometimes lead to fatal consequences. It is urgent, in fact, to identify best practices to reduce excess mortality caused by these inequalities; for example, by addressing the unfair distribution of socio-economic factors. At the same time, the pandemic has shown the limit of certain concepts and mechanisms of our societal functioning. The classical typology of welfare state regimes as a tool for classifying countries according to their social policies may need to be reconsidered, because strong social security and functioning pro-equitable social policies seem to not automatically guarantee better health outcomes, even in cases of the lowest health inequalities.

Mental health is not exempt from health inequalities, and the complexity of the impacts they may have on it needs to be studied to underpin specific approaches. The intersectional approach plays an important role. Incorporating users' perspectives in designing research, selecting health endpoints in research, and using an evidence base to inform policy and monitor interventions, should become supported practices.

Further recommendations suggest:

- Investigating health crises' impacts from diverse perspectives (e.g., healthcare use, self-reported mental health, and suicide, with anthropological ethnographic and participatory methods, etc.), considering diverse effects that might be generated on different vulnerable groups.
- Ensuring that policy development is accompanied by implementation research; that is, the study of impacts of policy decisions on vulnerable groups with the aim of progressively improving the equity, relevance, and efficacy of policy action.
- Implementing intersectional policy analysis of the mental health of vulnerable groups to help capture their mental health needs and challenges along the migration cycle.

3. Fostering social connectedness

This report has shown the importance, both for the general population and vulnerable groups, of recognising the value of meaningful relationships—particularly given the COVID-19 outbreak. This is true for migrant and refugee populations, who experienced an increased sense of loneliness during the pandemic. As we have seen, the studies presented in this report have underlined how increasing timely measures to enhance diverse forms of social interactions, mutual support, connectedness, and well-being, contribute to preventing and alleviating adverse mental health effects, including its most severe manifestation (i.e., suicide), and other negative health outcomes. Social connectedness should be encouraged both within members of the same community, and with others (i.e., the country of origin and its societal heritage, the host community). This social dynamic also has broader policy implications, meaning that solutions sometimes don't reside exclusively in domestic policies within the EU but also have implications for the relationship between the EU and the rest of the world. In order to maintain and foster social connectedness within groups and communities, it is crucial to implement different types of strategies and good practices, like:

- Encouraging formal and informal support given by organisations to sub-groups and marginalised people, with special attention paid to migrant and refugee populations, women, children and gender-diverse people;
- Creating protective hubs to support the physical and emotional needs of vulnerable individuals (i.e., victims of gender-based violence or obstetrical violence, migrants, and refugees), who can engage with local volunteers and peers, thus promoting social integration and easing the sense of isolation;
- Encouraging migrant and refugee populations to recreate social connectedness with their country of origin, as well as with their heritage community, by fostering engagement in the host culture;
- Encouraging migrant and refugee populations to foster communication with their relatives and friends, by setting up (free) phone conversations or by helping them utilise different types of social media or other online platforms;
- Adopting a human-rights–based approach of mental health for all, meaning a sensitive and inclusive psychosocial approach for refugees and migrants;
- Supporting the adoption of the *intersectional* approach in comprehensive strategies on mental health, which entails a broader understanding of the socio-economic determinants of mental health, with particular attention paid to those who face multiple and intersecting forms of discrimination, including on the basis of ethnicity, religion, sexual orientation, and gender identity, migration status, age, or disability[44].

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[44] This approach must consider the underlying structural problems of mental healthcare systems.

4. Improving equitable pandemic preparedness and response policies

The pandemic has highlighted areas where our pandemic preparedness, both at the local and the EU level, could be strengthened. Improving pandemic preparedness policies, based on a more equitable principle, scientifically supported, and accordingly funded, might prevent several negative health outcomes, including those pertaining to mental health. In fact, adjusting control measures to decrease the impact of possible stressors could favour the recognition of the needs of vulnerable groups, and act to fulfil them.

Trust plays an important role in policy enforcement, and this is particularly important in a pandemic situation. For example, in order to decrease health inequalities, it is crucial that authorities, both at the EU and local level, promote initiatives to reduce vaccine hesitancy of vulnerable groups with accessible trustworthy public health information and engagement campaigns.

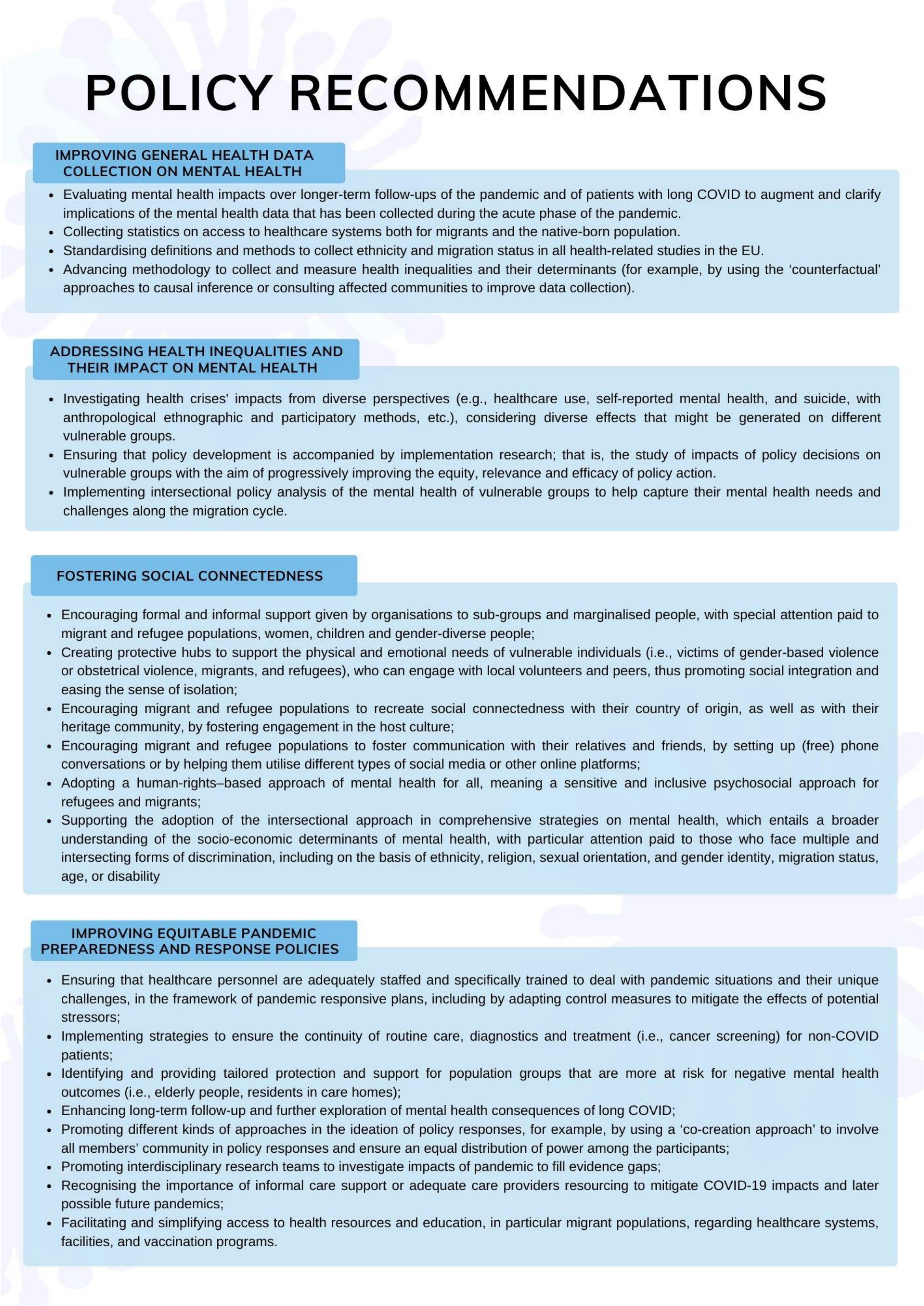
The implementation of *equitable* pandemic preparedness should be conceived by considering social justice concerns, given that both socioeconomic and health inequalities are largely preventable. Addressing the determinants that impact socioeconomic status and health outcomes holds significant importance in this regard, and should cover several policy areas, for example:

- Ensuring that healthcare personnel are adequately staffed and specifically trained to deal with pandemic situations and their unique challenges, in the framework of pandemic responsive plans, including by adapting control measures to mitigate the effects of potential stressors;
- Implementing strategies to ensure the continuity of routine care, diagnostics and treatment (i.e., cancer screening) for non-COVID patients;
- Identifying and providing tailored protection and support for population groups that are more at risk for negative mental health outcomes (i.e., elderly people, residents in care homes);
- Enhancing long-term follow-up and further exploration of mental health consequences of long COVID;
- Promoting different kinds of approaches in the ideation of policy responses, for example, by using a 'co-creation approach' to involve all members' community in policy responses and ensure an equal distribution of power among the participants;
- Promoting interdisciplinary research teams to investigate impacts of pandemic to fill evidence gaps;

- Recognising the importance of informal care support or adequate care providers resourcing to mitigate COVID-19 impacts and later possible future pandemics;
- Facilitating and simplifying access to health resources and education, in particular migrant populations, regarding healthcare systems, facilities, and vaccination programs.

The proposed set of recommendations aims to promote the generation of effective and good practices, particularly for the mitigation of the effects on mental health of vulnerable groups caused by COVID-19 pandemic. To this end, we have covered recommendations that encompass both the mitigation of the pandemic's overall impact—including for future prevention—and the alleviation of its harmful effects on mental health, in order to aid some pathways to transformation. Each of these clusters should be thought of as interconnected and is not intended to be considered separately. As we have highlighted in this report, improving pandemic response and mitigating health inequalities and the impact on mental health of vulnerable groups requires shared efforts and joint measures.

Figure 2. Policy recommendations



POLICY RECOMMENDATIONS

IMPROVING GENERAL HEALTH DATA COLLECTION ON MENTAL HEALTH

- Evaluating mental health impacts over longer-term follow-ups of the pandemic and of patients with long COVID to augment and clarify implications of the mental health data that has been collected during the acute phase of the pandemic.
- Collecting statistics on access to healthcare systems both for migrants and the native-born population.
- Standardising definitions and methods to collect ethnicity and migration status in all health-related studies in the EU.
- Advancing methodology to collect and measure health inequalities and their determinants (for example, by using the 'counterfactual' approaches to causal inference or consulting affected communities to improve data collection).

ADDRESSING HEALTH INEQUALITIES AND THEIR IMPACT ON MENTAL HEALTH

- Investigating health crises' impacts from diverse perspectives (e.g., healthcare use, self-reported mental health, and suicide, with anthropological ethnographic and participatory methods, etc.), considering diverse effects that might be generated on different vulnerable groups.
- Ensuring that policy development is accompanied by implementation research; that is, the study of impacts of policy decisions on vulnerable groups with the aim of progressively improving the equity, relevance and efficacy of policy action.
- Implementing intersectional policy analysis of the mental health of vulnerable groups to help capture their mental health needs and challenges along the migration cycle.

FOSTERING SOCIAL CONNECTEDNESS

- Encouraging formal and informal support given by organisations to sub-groups and marginalised people, with special attention paid to migrant and refugee populations, women, children and gender-diverse people;
- Creating protective hubs to support the physical and emotional needs of vulnerable individuals (i.e., victims of gender-based violence or obstetrical violence, migrants, and refugees), who can engage with local volunteers and peers, thus promoting social integration and easing the sense of isolation;
- Encouraging migrant and refugee populations to recreate social connectedness with their country of origin, as well as with their heritage community, by fostering engagement in the host culture;
- Encouraging migrant and refugee populations to foster communication with their relatives and friends, by setting up (free) phone conversations or by helping them utilise different types of social media or other online platforms;
- Adopting a human-rights–based approach of mental health for all, meaning a sensitive and inclusive psychosocial approach for refugees and migrants;
- Supporting the adoption of the intersectional approach in comprehensive strategies on mental health, which entails a broader understanding of the socio-economic determinants of mental health, with particular attention paid to those who face multiple and intersecting forms of discrimination, including on the basis of ethnicity, religion, sexual orientation, and gender identity, migration status, age, or disability

IMPROVING EQUITABLE PANDEMIC PREPAREDNESS AND RESPONSE POLICIES

- Ensuring that healthcare personnel are adequately staffed and specifically trained to deal with pandemic situations and their unique challenges, in the framework of pandemic responsive plans, including by adapting control measures to mitigate the effects of potential stressors;
- Implementing strategies to ensure the continuity of routine care, diagnostics and treatment (i.e., cancer screening) for non-COVID patients;
- Identifying and providing tailored protection and support for population groups that are more at risk for negative mental health outcomes (i.e., elderly people, residents in care homes);
- Enhancing long-term follow-up and further exploration of mental health consequences of long COVID;
- Promoting different kinds of approaches in the ideation of policy responses, for example, by using a 'co-creation approach' to involve all members' community in policy responses and ensure an equal distribution of power among the participants;
- Promoting interdisciplinary research teams to investigate impacts of pandemic to fill evidence gaps;
- Recognising the importance of informal care support or adequate care providers resourcing to mitigate COVID-19 impacts and later possible future pandemics;
- Facilitating and simplifying access to health resources and education, in particular migrant populations, regarding healthcare systems, facilities, and vaccination programs.

6. Conclusions

6. Conclusions

This report, through its different chapters, presented evidence about the direct and indirect impact of COVID-19 on the mental health of specific vulnerable groups. It showed how new forms of inequalities have appeared, generating new vulnerabilities, and how others have been exacerbated, particularly because of the advent of the pandemic.

It also explored the concept of health inequalities, and its practical ramifications, in more depth. Accordingly, our policy section focused on the interrelationships between policies and health inequalities, discussing how the first may influence and shape the latter, when designed from a partial perspective or not conceived as 'integrated' and 'comprehensive'. The policy section also presented different recommendations, organised around four main clusters, aimed at informing and guiding policymakers in generating good practices, as well as the implementation of evidence-based policies and initiatives around mental health and the challenges they may pose. The rich evidence base brought together in this study underlines the importance of working across disciplines and settings to identify some common themes that can then help to inform future directions in research and care.

Nevertheless, this report is not intended to be understood as exhaustive and presents some limitations. First, it didn't cover *all* vulnerable populations and vulnerabilities, but chose to focus on a select few. Some vulnerable populations, like children or the elderly, whose mental health was particularly affected during the pandemic—due to lockdowns and school closures[45], respectively, as well as isolation—were not directly studied in this report, but their situation was indirectly explored. For example, younger people and people from minoritised communities were extensively analysed in section 2.2 of this report. Other vulnerable groups, for example, people who became unemployed because of lockdowns or because of the downturn of the economy, among others, couldn't be presented in this report in a specific chapter. Nevertheless, it is important to recognise that considerations around the socio-economic status of certain individuals and groups were explored transversally in most of our sections, albeit indirectly. The policy section, on its part, presented some examples on how policies—even if they were meant to protect—have sometimes worsened the effect of the COVID-19 pandemic on the mental health of vulnerable groups, including those who were not studied in this report, like children and adolescents. Finally, it has to be noted that our report necessarily focuses on the active phase of the pandemic, but long COVID is likely to exert

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[45] See the PERISCOPE report D2.3 *Mental health impacts in different European populations*.

additional and continuing impacts on mental health and inequality, and these require further study.

Policies play an important role in reducing and eliminating the adverse effects of COVID-19 on mental health, in both general and vulnerable populations. This report suggested that the lessons we have gained through its specific examples are not only beneficial for the particular populations involved, but also serve as valuable insights, offering more comprehensive guidance for enhanced preparedness.

As a crucial and transversal message, this report identified the need to thoroughly examine and draw lessons from the COVID-19 pandemic, particularly in understanding how specific population groups were impacted differently. This understanding can significantly enhance our preparedness and the formulation and implementation of more effective policies and interventions for future pandemics.

APPENDIX 1

APPENDIX 1

Expert workshop

COVID-19 Mental Health Impacts on Vulnerable Groups (March 29, 2023)

April 24, 2023

Set of policy recommendations

The recommendations listed below are the result of each partner's research and were discussed during a preparatory workshop, held on January 18, 2023. The insights gathered during the first workshop were used to further develop a policy-driven discussion during a follow-up meeting, held on March 29, 2023.

Subsequent edits have been made thanks to additional feedback.

The set of policy recommendations is organised along four main clusters.

➔ *Improve health data collection and sharing*

- Improve health data production, availability, and access, including disaggregated data.
- Facilitate data sharing within and outside the EU.
- Standardise health data to facilitate exchange and comparison between countries.
- Refresh methodology used to collect and measure data (i.e., by identifying the target).
- Invest in data infrastructures and data monitoring.
- Collect statistics on access to healthcare systems for both migrants and the local population.

➔ *Measure health inequalities and mental health impacts*

- Reconsider the concept of welfare state typology as a tool for classifying countries according to their social policies.
- Identify best practices to reduce mortality inequalities, e.g., equalisation of distribution of socio-economic factors.
- Address the lack of population evidence about the effectiveness of policies. Implement better measurements to identify the gaps and strengths of such policies.
- Implement intersectional policy analysis of the mental health of vulnerable groups to help capture their mental health needs and challenges along the migration cycle.
- Investigate health crises' impacts from diverse perspectives (e.g., healthcare use, self-reported mental health, etc.), considering diverse effects that might be generated on different vulnerable groups.

➔ *Foster social connectedness*

- Encourage formal and informal support given by organisations to sub-groups and marginalised people, with special attention paid to the migrant and refugee populations, women, children, and gender diverse people included in these groups.
- Create protective hubs to support the physical and emotional needs of vulnerable individuals (i.e., victims of gender-based violence; obstetrical support provision; migrants and refugees), who can engage with local volunteers and peers, thus promoting social integration and easing the sense of isolation.
- Increase timely measures to enhance diverse forms of social interactions, inter-support, connectedness and well-being, recognised to prevent and alleviate adverse mental health effects, including its most severe manifestation (i.e., suicide).
- Encourage migrant and refugee populations to recreate social connectedness with their country of origin within the EU neighbourhood policy, as well as with their heritage community, by fostering engagement in the host culture.
- Encourage migrant and refugee populations to foster communication with their relatives and friends, by setting up (free) phone conversations or by helping them utilise different types of social media or other online platforms.
- Foster the adaptability of healthcare systems at national and local levels to societal and population needs, particularly during emergencies.
- Adopt a human-rights–based approach of mental health for all, meaning a sensitive and inclusive psychosocial approach to refugees and migrants.
- Create a dedicated and intersectional European Strategy on Mental Health which covers the socio-economic determinants of mental health, with particular attention paid to those who face multiple and intersecting forms of discrimination, including on the basis of ethnicity, religion, sexual orientation and gender identity, migration status, age, or disability[46].

➔ *Equitable pandemic preparedness and response policies*

- Improve pandemic preparedness policies so they are based on a more equitable principles, scientifically supported, and accordingly funded.
- Ensure that healthcare personnel are adequately staffed and specifically trained to deal with pandemic situations and their unique challenges, in the framework of pandemic responsive plans, including by adapting control measures to mitigate the effects of potential stressors.
- Implement strategies to ensure the continuity of routine care and support (i.e., cancer screening).
- Promote legal determinants of health.
- Identify and provide tailored protection and support to population groups that are more at risk for negative mental health outcomes (i.e., elderly people, residents in care homes).
- Render visible the needs of vulnerable groups, adjust control measures to decrease the impact of possible stressors.

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[46] This approach must consider the underlying structural problems of mental healthcare systems.

- Promote a "co-creation approach"[47] when involving communities in policy responses.
- Promote interdisciplinary research teams to investigate the impacts of pandemic to illuminate blind spots.
- Stress social justice issues, as socioeconomic and health inequalities are avoidable, and ones, mitigating socioeconomic health determinants is crucial.
- Reckon with the importance of informal care support or adequate care providers sourcing to mitigate COVID-19 impacts and possible future pandemics.
- Facilitate and simplify access to health resources and education, particularly for migrant populations, regarding healthcare systems, facilities, and vaccination programs.
- Reduce vaccine hesitancy in vulnerable groups with accessible trustworthy public health information and sensibilisation campaigns.

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[47] "Co-creation" is a model that promotes such meaningful engagement, emphasizing the equalization of powers of all participants in the process.

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Pan-European Response to the ImpactS of COVID-19 and future Pandemics and Epidemics