

WHITE PAPER ON PUBLIC HEALTH RESPONSES DURING THE COVID-19 PANDEMIC:

*lessons learnt and
recommendations for
policy makers*



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Introduction & context

The COVINFORM project explores the impact of the COVID-19 pandemic and associated national, regional, and local responses, including a special focus on the impact on vulnerable and marginalized groups. The project aims to develop solutions, guidelines, and recommendations to ensure that the needs of vulnerable and marginalised groups are appropriately considered in potential further waves of COVID-19 and future pandemics.

Public health impact and response in the context of the COVID-19 pandemic can be usefully examined using different theoretical lenses. Intersectionality theory highlights how the COVID-19 pandemic has reinforced and widened pre-existing vulnerabilities and disadvantages relating to gender, age, socioeconomic status and ethnicity/race and migration. Additionally, the introduction of COVID-19 measures such as home schooling, teleworking and social distancing brought new experiences of vulnerability to the fore. A link to complex systems theory highlights how a 'complex problem' like the COVID-19 pandemic can only be understood by holistically considering the complex interlinkages between various system components. As such, insights related to COVID-19 public health impact and response cannot be understood in isolation from issues of governance, crisis communication practices, economic impact, and social inequalities.

This white paper explores the multifaceted impact of the COVID-19 pandemic on healthcare systems and responses across ten case study countries. It delves into various aspects of the pandemic, including healthcare system preparedness plans, response implementation, challenges, public reactions, and the vulnerabilities of different groups. The analysis also examines how social, cultural, institutional, legal, and data-related factors influenced public health responses. Furthermore, it assesses the critical role of public health communication and its impact on epidemiological outcomes. Finally, the paper highlights the significant effects of COVID-19 on healthcare workers.

The COVID-19 pandemic presented unprecedented challenges to public health systems worldwide. As countries grappled with the rapidly evolving situation, the responses and their consequences varied significantly. This white paper addresses three critical research questions (RQs) to shed light on the complexities of the pandemic response and its impact:

- **RQ1:** How have COVID-19 public health responses been received, implemented, and adapted across diverse local contexts and groups?
- **RQ2:** How have vulnerabilities and structural health inequalities been addressed and/or exacerbated by COVID-19 public health responses?
- **RQ3:** How has the COVID-19 pandemic impacted health care workers across diverse contexts and care settings?

The findings of this comparative project aim to demonstrate that policy makers need to include various dimensions of public health responses and to address key factors which have influenced national and subnational responses. The COVID-19 pandemic has reinforced and widened pre-existing vulnerabilities and disadvantage relating to gender, age, socio-economic status and ethnicity/race and migration, as well as how the COVID-19 public health impact and response cannot be understood in isolation from issues of governance, crisis communication practices, economic impact, and social inequalities.

Key message: Public health responses need to be tailored to all citizens and include vulnerable groups in society

In responding to the COVID-19 pandemic, public health measures need to be tailored to encompass the entire population, with a specific focus on addressing the unique needs of vulnerable groups within society. This document underscores the importance of acknowledging and mitigating vulnerabilities and provides illustrative examples from various countries to underscore the significance of these considerations in pandemic responses.

An examination of national health systems through a comparative analysis reveals distinct structural variations that significantly impact a country's capacity to respond to the COVID-19 crisis. These structural distinctions persist throughout the pandemic and profoundly influence the nature of public health responses and their repercussions. Across different nations, the processes of governance, decision-making, and consultation in response to COVID-19 exhibit substantial disparities. These distinctions underscore the critical nature of comprehending governance structures related to health and well-being, including considerations like centralization versus decentralisation, autonomy levels, communication frameworks, and preparedness for pandemics. Legal factors also play a pivotal role in understanding the implementation of restrictive measures and responses related to disease surveillance.

While measures aimed at safeguarding vulnerable groups were first put into place, they occasionally yielded mixed outcomes and unintended effects. Initially oriented towards addressing physical vulnerability and reducing severe COVID-19

outcomes, such measures included restrictions on visits to healthcare facilities. Nonetheless, delays in implementing lockdowns and insufficient pandemic preparedness left many vulnerable populations inadequately shielded.

Furthermore, the pandemic's economic repercussions exacerbated vulnerabilities, particularly concerning social class, gender, and ethnic background. Vulnerable communities encountered difficulties in complying with containment measures, endured extended periods of quarantine, suffered income loss, and encountered disparities in accessing healthcare. The pandemic also disrupted non-COVID healthcare services, amplifying structural inequalities and underscoring the necessity of addressing the social determinants of health.

In summary, the COVID-19 pandemic has exposed pre-existing vulnerabilities and health disparities. It underscores the urgency of comprehensively addressing socio-economic inequalities and ensuring equitable access to healthcare and resources. Encouraging practices encompass targeted interventions, inclusive policies, systematic data collection, and recognition of socio-economic factors. Strengthening social services and enhancing coordination between government levels and healthcare providers are invaluable lessons that should guide future pandemic preparedness and response strategies to guarantee equitable care for all segments of society.

Recommendations

Recommendation 1:

Pandemic preparedness and adaptability

WHY?

The COVID-19 public health responses varied significantly across the countries, shaping a diverse landscape of successes, challenges, and adaptive strategies. One challenge faced by many countries in adapting to the evolving situation was the lack of a national pandemic plan. Often the only preparedness which countries had were outdated influenza plans, which limited the response. Other structural factors prevented countries from adapting so easily to the pandemic, including complex government structures and unclear divisions of responsibilities. The following recommendations aim to address the challenges observed during the COVID-19 pandemic and lay the foundation for more adaptive, efficient, and coordinated responses in the face of future health crises.

HOW?

- ① Develop and maintain up-to-date national pandemic plans distinct from influenza plans to ensure preparedness for diverse health crises.
- ② Simplify complex government structures to enhance crisis management efficiency. Clarify and streamline the division of responsibilities between federal, regional, and local levels including establishing effective coordination mechanisms between the central government and autonomous regions.
- ③ Foster co-governance arrangements to promote collaboration, even in politically tense situations. For example, develop uniform and effective communication strategies across the entire country and improve communication between different levels of decision-makers to ensure a coherent response.
- ④ Promote transparent governance practices to build public trust and implement clear and accountable decision-making processes, particularly during crises.
- ⑤ Foster effective collaboration between government levels and scientific communities to base decisions on technical-scientific evidence.
- ⑥ Enhance multilevel structures to facilitate cooperation and coordination between different healthcare facilities and agencies. This includes promoting functional cooperation between different hospital facilities, as demonstrated by Italy's National Health Plan (SSN).

Recommendation 2: Different dimensions of vulnerabilities

WHY?

Vulnerability encompasses various dimensions, including physical health status, susceptibility to severe COVID-19 illness or health system disruptions, and social vulnerability tied to societal disparities like occupation, deprivation, family circumstances, legal status, and ethnicity. Additionally, vulnerability may arise from communication-related issues, where socio-structural, individual-level, and situational factors hinder access, comprehension, and response to COVID-19 communication. The global response to the pandemic witnessed evolving priorities in addressing vulnerability. Many countries, like Belgium, initially emphasized physical vulnerability, with increasing focus on social vulnerability as the pandemic progressed.

Early measures prioritized reducing loss of life but were hindered by delays in lockdowns and inadequate preparedness, leaving vulnerable groups insufficiently shielded. The pandemic also laid bare weaknesses in healthcare systems, often characterized by under-resourcing. Socio-economic vulnerabilities, linked to class, gender, and ethnicity, worsened due to crowded living conditions and overrepresentation in essential professions. Vulnerable populations, including the elderly and marginalized communities, faced elevated risks due to healthcare access disparities. Disruptions in non-COVID healthcare services exacerbated structural inequalities, limiting access to necessary medical care. Furthermore, the economic fallout of the pandemic exacerbated vulnerabilities across society.

These recommendations aim to enhance the preparedness and response to health crises by addressing vulnerabilities comprehensively and ensuring equitable access to healthcare and resources for all citizens, with a particular focus on vulnerable groups.

HOW?

- Explicitly consider various dimensions of vulnerability, including mental and physical health, social inequities, and communication-related factors, in pandemic planning and response. Explicitly include social determinants of health in pandemic plans, recognizing the interconnectedness of health and non-health vulnerabilities.
- Develop targeted interventions and inclusive policies to address the specific needs of vulnerable populations, including the elderly, people with disabilities, immigrants, and marginalised communities.
- Adapt communication strategies to engage with local contexts and accommodate diverse populations, ensuring that information reaches and is understood by vulnerable groups.
- Implement consistent data collection practices that take into account socio-economic factors to better understand and address vulnerabilities.
- Comprehensively address socio-economic inequalities to ensure equitable access to healthcare, resources, and support. Invest in robust social services and infrastructure to support vulnerable individuals and communities during crises.
- Adopt a holistic approach to addressing structural health inequalities, considering changing dimensions of vulnerability during a crisis.
- Involve local leaders and communities in crisis response efforts, particularly when reaching non-native speakers, to enhance community engagement.

Recommendation 3: Data management and coordination

WHY?

The impact of data collection factors was analysed by considering the necessity for ongoing systematic collection, analysis and interpretation of data to guide the planning and implementation of public health measures and interventions, and an analysis of challenges related to underreporting, temporal delays, and data disaggregation in the COVID-19 pandemic. During the pandemic, the tension between data protection and health protection underscored the complexity of addressing vulnerabilities. For example, Austria encountered issues with disaggregated data collection due to strict data protection laws, hindering the identification of risk and vulnerability indices. Health data is identified as a special form of data and is therefore not easily accessible for public health institutions. Because of this reason, it was often not simple to identify health vulnerabilities. Enhanced data sharing and analysis have the potential to bolster response strategies, catering to diverse population segments. Thus, the predicament of striking a balance between data protection and public health came to the forefront, raising concerns about safeguarding both data and health. The following recommendations take this into account.

HOW?

- Operational research can be conducted to inform and guide decision making.
- Data could be better made available to researchers, who can use it to steer decision making and cater to diverse population segments.
- Transparent communication with regards to the release of detailed data.
- Address data protection concerns and misinformation to maintain public trust.
- Consistent and comparable data collection to bolster standardised testing criteria.

Recommendation 4: Health care system and workers

WHY?

The impact of the COVID-19 pandemic on health care workers (HCWs) was analysed by considering the way their working realities were transformed, their risk of infection, mental health implications, and the public perception of health workers in society. A broader discussion of differential vulnerability highlighted the relevance of diverse drivers of vulnerability in the COVID-19 pandemic.

The COVID-19 pandemic has had profound impacts on healthcare workers across all case study countries. Healthcare workers faced increased workloads, longer working hours, and heightened risks of exposure to the virus. They experienced physical and emotional stress, shortages of personal protective equipment, and challenges in managing COVID-19 patients. Burnout, mental health issues, and financial problems were prevalent among healthcare workers, highlighting the strain they faced during the pandemic. Despite the unique aspects of how healthcare workers were affected in each country's case study, the shared experiences of healthcare workers across countries reflect the global impact of the pandemic on their well-being.

HOW?

- Provide comprehensive and adaptable support systems for HCWs, including mental health resources and leadership support.
- Ensure equitable pay and recognition for healthcare workers.
- Explore the use of Community Health Workers and practices.
- Ensure access to adequate personal protective equipment, strengthening healthcare-associated infection control in institutions, and developing inclusive strategies for healthcare delivery.
- Increase value placed on the social care sector, and prioritise funding of care within society.
- Ensure these factors are addressed within pandemic preparedness plans.

Conclusion

This study has revealed the mixed implementation and reception of public health responses, the need to address vulnerabilities and structural health inequalities, and the challenges faced by healthcare workers. The COVID-19 pandemic has presented unprecedented challenges to healthcare systems and responses across the world. While there are commonalities in how countries have addressed these challenges, there are also unique aspects in each case study country's approach. Understanding these variations and shared experiences is crucial for informed decision-making and preparedness for future pandemics. This white paper provides a comprehensive overview of the impact of COVID-19 on healthcare systems, vulnerabilities, public health responses, and healthcare workers, offering valuable insights for policymakers, healthcare professionals, and researchers.

Many countries initially received public health responses positively, with citizens showing solidarity and supporting measures such as lockdowns and curfews. However, as the pandemic progressed, satisfaction with these measures waned, leading to scepticism, especially in areas such as testing and contact tracing. Promising practices emerged from these experiences, emphasizing ongoing engagement with diverse local contexts and groups to address concerns and ensure compliance, as well as the importance of sustained communication and transparency in decision-making.

As the pandemic progressed, attention shifted from focusing on physical vulnerability towards social vulnerability, and measures were introduced to address the needs of vulnerable

populations. The tension between data protection and health protection highlighted the challenges of collecting data to identify risk and vulnerability indices. Targeted measures for vulnerable groups, such as the elderly and those with pre-existing health conditions, yielded mixed results due to delays in implementing protective measures. Socio-economic vulnerabilities, including class, gender, and ethnic background, were exacerbated by the pandemic, with disparities in healthcare access and disrupted non-COVID healthcare services.

The impact of the COVID-19 pandemic on healthcare workers was profound and varied across different countries and care settings. HCWs encountered a range of challenges, including increased workloads, heightened exposure risks, shortages of personal protective equipment (PPE), and mental health strains. Despite their resilience and dedication, the inadequacy of support systems and resources, compounded by existing structural underfunding and staffing issues, intensified the crisis faced by HCWs.

Although the pandemic revealed useful insights into specific promising practices and targeted lessons learnt, it highlighted that structural changes are needed to address socio-economic inequalities and vulnerabilities in society. These inequalities were already present prior to the pandemic, and have been further accentuated by its impact.

The COVINFORM project

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