



HAL
open science

Covid-19 pandemic: a catalyst for accelerating global action on patient safety

Rebecca Grant, Daniel Benamouzig, Howard Catton, Vincent Chi-Chung Cheng, Neelam Dhingra, Ramanan Laxminarayan, Helena Legido-Quigley, Susanna Lorenzo Martinez, Kadar Marikar, Marc Mendelson, et al.

► **To cite this version:**

Rebecca Grant, Daniel Benamouzig, Howard Catton, Vincent Chi-Chung Cheng, Neelam Dhingra, et al.. Covid-19 pandemic: a catalyst for accelerating global action on patient safety. *The Lancet Infectious Diseases*, 2023, 23 (10), pp.1108-1110. 10.1016/S1473-3099(23)00485-1 . hal-04368975

HAL Id: hal-04368975

<https://hal.science/hal-04368975>

Submitted on 3 Jan 2024

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

COVID-19 pandemic: A catalyst for accelerating global action on patient safety

Authors: Rebecca Grant,¹ Daniel Benamouzig,² Howard Catton,³ Vincent Chi-Chung Cheng,⁴ Neelam Dhingra,⁵ Ramanan Laxminarayan,⁶ Helena Legido-Quigley,⁷ Susanna Lorenzo Martinez,⁸ Kadar Marikar,⁹ Marc Mendelson,¹⁰ Pierre Parneix,¹¹ Eli Perencevich,¹² Hardeep Singh,¹³ Sarah Tschudin Sutter,¹⁴ Shin Ushiro,¹⁵ Evelyn Wesangula,^{16,17} Céline Gardiol,¹⁸ Gerald Dziekan,¹⁸ Stephan Harbarth,¹ Didier Pittet¹

Affiliations:

1. Infection Prevention and Control Programme, Geneva University Hospital and Faculty of Medicine, University of Geneva, Geneva, Switzerland
2. Sciences Po, Centre de Sociologie des Organisations and Chaire Santé, CNRS, Paris, France
3. International Council of Nurses, Geneva, Switzerland
4. Department of Microbiology, Queen Mary Hospital, Hong Kong Special Administrative Region, China
5. Patient Safety Flagship Unit, World Health Organization, Geneva, Switzerland
6. One Health Trust, Washington DC, United States of America
7. Imperial College and the George Institute for Global Health, London, United Kingdom
8. Hospital Universitario Fundacion Alcorcon, Madrid, Spain
9. Malaysian Society for Quality in Health, Kuala Lumpur, Malaysia
10. Division of Infectious Diseases & HIV Medicine, Department of Medicine, Groote Schuur Hospital, University of Cape Town, Cape Town, South Africa
11. Nouvelle Aquitaine Healthcare-Associated Infection Control Centre, Bordeaux University Hospital, Bordeaux, France
12. Department of Internal Medicine, University of Iowa Carver College of Medicine, Iowa City, United States of America
13. Center for Innovations in Quality, Effectiveness and Safety, Michael E. DeBakey Veterans Affairs Medical Center and Baylor College of Medicine, Houston, United States of America
14. Division of Infectious Diseases & Hospital Epidemiology; University Hospital Basel, Basel, Switzerland
15. Division of Patient Safety, Kyushu University Hospital, Fukuoka, Japan
16. East Central and Southern Africa Health Community, Arusha, Tanzania
17. Patient and Health Workers Safety Division, Ministry of Health, Nairobi, Kenya.
18. Federal Office of Public Health, Bern, Switzerland

Background

Preventing harm to patients and ensuring the delivery of safe health care is a global challenge and one that predates the COVID-19 pandemic. To address the burden of patient harm, the seventy-second World Health Assembly adopted a resolution on global action on patient safety in 2019.¹

However, the COVID-19 pandemic exacerbated previously known safety risks and sources of harm in health care and introduced new ones for both patients and health workers. For example, the unprecedented demand for health care during the height of the pandemic resulted in substantial disruptions to health services, including the delivery of essential health services, continuum of care for patients with non-COVID-19-related disease, and shortages in staffing and supplies. In addition, nosocomial outbreaks of COVID-19 occurred, with severe outbreaks of COVID-19 in long-term care facilities and geriatric wards, particularly prior to the introduction of COVID-19 vaccines.²⁻⁴

The fifth Global Ministerial Summit on Patient Safety was held in Montreux, Switzerland in February 2023.⁵ Over two days, scientific and public health experts, Ministerial delegations, and high-level representatives gathered to advance the strengthening of patient safety globally. In the context of the ongoing COVID-19 pandemic, the Global Ministerial Summit reaffirmed Ministerial commitments to ensuring safe health care, as described in the Montreux Charter on Patient Safety,⁶ centred around the World Health Organization Global Patient Safety Action Plan 2021-2030.⁷

In this position paper, we summarize the key messages and conclusions of the Global Ministerial Summit related to the implications of the COVID-19 pandemic for patient safety.

Impacts of the COVID-19 pandemic on patient safety

In preparation for the fifth Global Ministerial Summit, the Swiss Federal Office of Public Health initiated and funded the development of a narrative rapid review of the implications of the COVID-19 pandemic for patient safety, coordinated by the Patient Safety Flagship unit at the World Health Organization.⁸ While the pandemic is ongoing, the burden of risks and avoidable harm has not yet been fully assessed or quantified. The narrative review aimed at

assessing the impacts of COVID-19 thus far on a wide array of risks and avoidable harm related to diagnostics, treatment, and care management (Table 1).⁸

Overall, the COVID-19 pandemic revealed a range of safety gaps across all core components of health systems. The disruption of health systems and care delivery during the pandemic led to an increase in clinical risks and patient harm due to the accentuation of safety gaps, interruption of essential health services, and failure to provide timely diagnosis and treatment.⁸

Impact of the COVID-19 pandemic on health and care worker safety and health systems

The pandemic also caused substantial disruptive impacts on the health workforce. Infection prevention and control measures were often inadequate, compounded by inadequate knowledge, delayed recognition of the role of airborne transmission and transmission from pauci-/asymptomatic individuals, and shortages of appropriate personal protective equipment (PPE) early in the pandemic, resulting in direct harm to health and care workers, including an increased risk of health care-associated infections. Health and care workers have also continued to face considerable challenges of heavy workloads, fatigue, anxiety, stress, and burnout, as well as the impacts of understaffing and chronic underfunding. The failure to adequately care for health workers and to improve their working conditions has subsequently led to an exodus from the profession, exacerbating the health workforce shortage that existed before the pandemic,⁹ and further increasing challenges for patient safety.

Strengthening patient safety globally, in light of the COVID-19 pandemic

While the negative impacts of the pandemic on patient and health worker safety are clear, the lessons learned from the COVID-19 pandemic serve as a catalyst for accelerating global action on patient safety.

Health and care worker education and compliance with infection prevention and control measures need to continue to be improved and infection control interventions that were reinforced during the pandemic should be institutionalized in routine care. Additionally, the speed and innovation with which clinical trials assessing the efficacy of novel therapeutics

and vaccine candidates were undertaken, as well as the streamlining of regulatory approval processes, should continue to serve as a basis for generating high quality evidence for clinical management and public health policy decisions. All of these efforts require commitment at the political level, as well as the continued engagement of the patient safety community.

Beyond the patient safety community, it is important that safe health care remains elevated on political and policy making agendas at all times, not just during crises. Multisectoral whole-of-government commitment and whole-of-society approaches, effective leadership, multidisciplinary scientific advice, adequate human resources, investments in local manufacturing to prevent acute shortage of medical products and technologies to ensure equitable access, integrated health system approaches with strengthened primary and acute care have all been identified as elements of a successful national responses to the pandemic.¹⁰ Importantly, these elements are essential to delivering safe health care and ensuring patient safety in all resource settings, while also building a resilient health system for future challenges and crises, including the next pandemic.

Conclusion

The need for safe, high-quality care and resilient health systems in all countries, with patient safety as an essential component, is already highlighted in the resolution WHA72.6 on global action on patient safety adopted during the World Health Assembly in 2019. The COVID-19 pandemic has demonstrated the urgency of preventing harm to patients and health workers and ensuring the delivery of safe health care. Global efforts to improve patient safety now need to be strengthened and accelerated.

Table 1. Summary of some of the safety risks and harm implications of the COVID-19 pandemic, adapted from World Health Organization (2022)⁹

Safety risks and harm implications of the COVID-19 pandemic	
Impact on patient safety in health care facilities	<p>Examples:</p> <ul style="list-style-type: none"> • Reduced resources, capacity and infrastructure to prevent and monitor known safety concerns • External regulatory oversight withdrawn and less attention given to routine safety and quality measures • Interruption of ongoing safety activities, such as safety analysis, mortality reviews, and hospital-wide safety and quality initiatives
Health care-associated infections	<p>Examples:</p> <ul style="list-style-type: none"> • Extensive nosocomial SARS-COV-2 outbreaks among patients and staff; high case fatality rates in long-term care facilities and nursing homes; post-COVID-19 condition • Insufficient and inadequate infection prevention and control measures • Increases in ventilator-associated events, central line-associated bloodstream infections, catheter-associated urinary tract infections and hospital-onset methicillin-resistant <i>Staphylococcus aureus</i> infections.
Antimicrobial resistance	<p>Example:</p> <ul style="list-style-type: none"> • Inappropriate and excessive use of antibiotics • Increases in transmission of antimicrobial resistant pathogens in healthcare settings
Medication safety	<p>Example:</p> <ul style="list-style-type: none"> • Use of unproven medications for prophylaxis and treatment for COVID-19
Diagnostic errors	<p>Examples:</p> <ul style="list-style-type: none"> • Lack of access to testing, reagents and delays in test results for SARS-CoV-2, particularly in resource-limited settings • Errors and interruptions to diagnosis of non-COVID-19 conditions, perpetuating transmission (HIV or tuberculosis)
Surgical safety	<p>Example:</p> <ul style="list-style-type: none"> • Postponement of surgical procedures; long preoperative delays
Other medical conditions	<p>Examples:</p> <ul style="list-style-type: none"> • Interruption of treatment and interventions in primary care, emergency, critical and operative care, rehabilitative, palliative and long-term care, and auxiliary services • Disruptions to immunization activities, cancer screening, antenatal and post-natal services, and preventive routine dental care • Pressure injuries or other skin integrity events, falls • Increases in mental health conditions; disruption in mental health prevention and management programmes
Health and safety of health and care workers	<p>Examples:</p> <ul style="list-style-type: none"> • Inadequate training for COVID-19 prevention, PPE supply shortages or inadequacies, challenges in maintaining physical distance and prevention protocols • Exacerbation of pre-existing shortages of human resources; high staff turnover • Increases in violence, stigma and harassment in the workplace; anxiety depression, fatigue and burnout

References

1. World Health Assembly, 72. Global action on patient safety. World Health Organization. 2019. Available from: <https://apps.who.int/iris/handle/10665/329284> (accessed 11 April 2023)
2. Arons MM, Hatfield KM, Reddy SC, et al. Presymptomatic SARS-CoV-2 Infections and Transmission in a Skilled Nursing Facility. *N Engl J Med*. 2020;382(22):2081-2090.
3. Vanhems P, Saadatian-Elahi M, Chuzeville M, et al. Rapid nosocomial spread of SARS-CoV-2 in a French geriatric unit. *Infect Control Hosp Epidemiol*. 2020;41(7):866-867.
4. Patel MC, Chaisson LH, Borgetti S, et al. Asymptomatic SARS-CoV-2 Infection and COVID-19 Mortality During an Outbreak Investigation in a Skilled Nursing Facility. *Clin Infect Dis*. 2020;71(11):2920-2926.
5. Fifth Global Ministerial Summit on Patient Safety. Available from: <https://pss2023.ch> (accessed 11 April 2023)
6. Fifth Global Ministerial Summit on Patient Safety. Montreux Charter on Patient Safety – “Less Harm, Better Care – from Resolution to Implementation” Available from: https://pss2023.ch/wp-content/uploads/2023/03/Montreux_Charter_Patient_Safety_Summit_2023.pdf (accessed 11 April 2023)
7. World Health Organization. Global patient safety action plan 2021–2030: towards eliminating avoidable harm in health care. World Health Organization. 2021. Available from: <https://apps.who.int/iris/handle/10665/343477> (accessed 11 April 2023)
8. World Health Organization. Implications of the COVID-19 pandemic for patient safety: a rapid review. World Health Organization. 2022. Available from: <https://apps.who.int/iris/handle/10665/361283> (accessed 11 April 2023)
9. GBD 2019 Human Resources for Health Collaborators. Measuring the availability of human resources for health and its relationship to universal health coverage for 204 countries and territories from 1990 to 2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2022 Jun 4;399(10341):2129-2154.
10. Haldane V, De Foo C, Abdalla SM, et al. Health systems resilience in managing the COVID-19 pandemic: lessons from 28 countries. *Nat Med*. 2021;27(6):964-980.