

# Preparing for Future Pandemics: Challenges for Healthcare Leadership

Sawsan Abuhammad 

Maternal and Child Health Department, Faculty of Nursing, Jordan University of Science and Technology, Irbid, 22110, Jordan

Correspondence: Sawsan Abuhammad, Email [Shabuhammad@just.edu.jo](mailto:Shabuhammad@just.edu.jo)

**Background:** The COVID-19 pandemic is our decade's largest global challenge of health leadership. There is an immediate urge to provide leadership and management with instruction during the extraordinary from before the recovery phase.

**Aim:** To determine the influence of the COVID-19 disease outbreak on leadership challenges during this difficult time.

**Methods:** This review of studies includes the work of scientists who have addressed the challenges of leadership at the time of COVID-19 pandemic. Furthermore, the references to the selected studies were used to locate additional research articles related to the topic challenges for leadership.

**Conclusion:** This new situation of the pandemics needs the leaders in the healthcare system to face many challenges. These challenges are being manager of the care, making decisions, caring for employees, preparing for the unexpected, and updating the community about the situation.

**Keywords:** pandemics, challenges, healthcare, healthcare leadership

## Introduction

All countries were impacted by the COVID-19 pandemic.<sup>1</sup> The pandemic caused millions of deaths all around the world and the morbidity that related to the pandemic and other diseases.<sup>2</sup> The pandemic not just impacted physical health but also mental health, socialization, and economic loss.<sup>3-5</sup> Many children suffered from school closure and decreased socialization, which would harm their future.<sup>6,7</sup> Economic losses were trillions of dollars, resulting from massive job losses and pressure on the health services sector.<sup>3,8</sup>

Despite laudable ad hoc initiatives, the medical countermeasures system is still not equal. The scientists believe this is not the last worldwide epidemic.<sup>9,10</sup> There is a constant threat of zoonotic infections and antibiotic resistance in the "Age of Pandemics", where the people live.<sup>11</sup> The healthcare system must be strengthened to build a system that can respond to future health crises in a timely, efficient, and effective manner and individuals must learn from this calamity and adopt the necessary reforms.<sup>12-14</sup>

Many countries presented a call for a new global agreement to use the outbreak as a historic moment to avert another global catastrophe of this magnitude.<sup>15</sup> As a result, the current healthcare system needs to be enhanced, but reforms and modifications alone will not suffice.<sup>16,17</sup> The people need a fundamental overhaul. A legally enforceable convention, accord, or arrangement might offer the member of the global Health Organization (WHO) an aspirational framework for better preventing, preparing, and reacting to pandemics.<sup>18</sup> This framework could be provided to developing and developed countries.

A new global tool is needed to break the cycle of "fear and neglect" by boosting the level of healthcare leadership's attention to pandemic preparedness and response.<sup>19</sup> Healthcare leaders must remain engaged and committed to pandemic preparedness even after the danger has passed.<sup>16</sup> Signatories to a new agreement should be summoned deliberately, ensuring that epidemic response and management are always on the minds of world healthcare leaders and encouraging better compliance through regular evaluations.<sup>20,21</sup> The healthcare leader roles focus on fostering cross-sectoral collaboration and coherence. A unified structure that brings together all the healthcare leaders with their key healthcare

institutions and organizations what multilateral cooperation is missing for preventing future pandemics.<sup>20,22</sup> The healthcare leaders will have many roles. These include being the provider of the health care, enhancing the system, and caring for employees during a crisis.<sup>23</sup>

## Managing the Care

First and foremost, the current pandemic has brought forth a slew of initiatives to prevent the spread of the disease and prepare for the future.<sup>24</sup> Cohesion would be improved, and fragmentation would be avoided if a convention is overseen by WHO were to be convened.<sup>18</sup> As of now, it is the only important notion that would build a global, inclusive forum for discussing and enhancing epidemic preparedness and response throughout the globe.<sup>23</sup>

Equal access to medical countermeasures, including immunizations, medications and diagnostics, is essential. These are all effective and safe. Pharmaceutical countermeasures have been more readily available in certain countries than in others.<sup>8</sup> Equitable access can only be achieved by enhancing and expanding production and strengthening distribution channels and institutional frameworks.<sup>25</sup> In addition, this might include a meaningful framework for the development, manufacture, and scaling up of innovative countermeasures and expanding access to current defensive measures.<sup>19,25</sup>

Third, the participants must trade data, samples, technology, and benefits. All the right information on infectious diseases must be disseminated worldwide as soon as possible.<sup>26</sup> A new plan might contain a global system for sharing data on monitoring and surveillance, genetics, and illnesses.<sup>27</sup> Research and technology exchange mechanisms may also be incorporated into the plan. The fourth step is to recognize the importance of One health. The health of humans, animals, plants, and the environment are all intertwined.<sup>28</sup> To reduce the risk of zoonotic illnesses, the human, animal, and environmental services industries must all work together more closely in the future.<sup>29</sup>

Helping employee to use and invest new program that gather COVID-19 patient data from various healthcare facilities, transfer the information to a cloud server, and making the data publicly available so that others can use it for various purposes. Healthcare practitioners can contact patients and have conversations with them using interactive live video conferencing software (Abdelkader, Alhusami, Nassar, Mahadeen, and Alqadrei, 2012; Muflih et al, 2021). Other applications would carry out routine patient health monitoring, such as follow-up visits, give directions on medical services, and disseminate information on the current COVID-19 condition and the most recent safety measures.

Only by working together, investing in global security to prevent and control epidemics and empowering WHO to fulfill its role as the most important public health agency in the world can we save lives and avert a repeat of COVID-19.<sup>19</sup> According to the people, a new instrument should be discussed at the next World Health Assembly. Individuals must use this once-in-a-generation opportunity to enhance global preparedness and response.<sup>30</sup> Waiting for another emergency is not an option, given the situation's urgency.

## Making Decisions

A lockdown was implemented in most countries before the initial COVID-19 epidemic because of the rapidly increasing number of illnesses and fatalities.<sup>10</sup> As a result of these shutdowns, the budget deficit, unemployment and existing socioeconomic disparities were exacerbated. Some countries, which decided not to close in the spring but paid a high price because it failed to safeguard the elderly from sickness, adopted a different method.<sup>17</sup> There is no information whether the model or approach will be "right" at this point, particularly with the annual occurrence of common cough and cold season and the consequent rise in disease.<sup>31</sup>

In a pandemic, healthcare leadership and decision-making ability are essential.<sup>20</sup> While the choice may be contentious and have substantial ramifications, healthcare leaders must be able to convince their workers or constituency that they have made the proper decision at the appropriate moment.<sup>16</sup> There must be constant communication and progress in the desired direction to keep the objectives alive. It is critical to make quick decisions in an uncertain environment, but it can be your last chance to make a difference.<sup>32</sup>

A problem must be recognized and thoroughly evaluated to make the optimal choice. Choosing a course of action based on the best available facts is essential. When faced with difficult decisions, it's our nature to put them off or downplay their importance (eg, cognitive bias).<sup>33</sup> Due to a lack of cooperation and organizational or economic constraints, healthcare leaders may be unable to develop an understanding of the current situation.<sup>34</sup>

Expecting and expressing what will be required in the future so that others may benefit from the accumulated knowledge and experience of others; openness to feedback and modifications; and a willingness to learn and adapt in response to new situations as they arise.<sup>28</sup> Mistakes are inevitable in this process and must be seen as an opportunity for growth. Avoiding the temptation to place blame is an important healthcare leadership responsibility.<sup>35</sup>

Situational judgements influence the timeliness of healthcare leaders' support for certain activities. Some countries' response to pandemic was rapid and successful, with minimal and manageable reinfection rates.<sup>20</sup> However, others may delay in response, and this causes more fatalities and diseases.<sup>32</sup> This was mostly dependent on healthcare leadership constancy and style of communication.

A lack of scientific information regarding the efficacy of prophylactic measures pushed governments to return to an uncertain future when the first wave of the pandemic subsided, and the economic ramifications of the closure became unbearable.<sup>36</sup> While civil liberties, personal data privacy, and individual liberty are important considerations for citizens, they should be evaluated against the need for epidemic tracking and control. In an emergency, the legislative process must adhere to the statute.<sup>37</sup> Situational analysis and scientific information must be considered while making these decisions.<sup>38</sup> These conflicting aims demand excellent healthcare leadership qualities in balancing them and finding the appropriate time to apply them.

## Caring for Employees

COVID-19 pandemic scenarios arouse more fear since the future is unclear and the situation unpredictable. People are in a constant state of anxiety because their daily routines have been upended.<sup>38,39</sup> As a result, the pandemic has exacerbated inequality, with the wealthy able to better cope with the imposed constraints than the poor. Racism, bigotry, and aggression have all risen in response to pandemic.<sup>23</sup>

It is uncommon for employees to skip vacations or prolong their shift length when the number of patients increases, and the associated risk of harm rises. Increasing the number of patients and death among healthcare workers in response to the pandemic raises the strain and the pressure on the healthcare system.<sup>23</sup> Healthcare leadership responsibility for the manager to recognize that their employees are susceptible to be infected with COVID-19.<sup>23,28</sup> To decrease conflict, personnel and management patterns should be changed to accommodate the pressure of pandemic.<sup>20</sup> To guarantee that healthcare service is not disrupted even if the pandemic lasts for a long time and many employees are affected, plans for coverage should be in place.<sup>16</sup> The pandemic's epidemiological features may need a significant decrease in critical care staff. During a pandemic, employees need support. Healthcare workers who experience high levels of stress, mental strain, and, in the worst-case scenario, ethical dilemmas need more than just supplies and training; they also require emotional and psychological support and strict adherence to professional<sup>23,40</sup> criteria. Staff shortages and job stress may be mitigated by rotating staff rosters while preserving a minimal work-life balance.

Healthcare leaders must be well-informed to conduct their jobs more successfully and with better understanding if any actions are made to maintain emergency care functioning seamlessly.<sup>41</sup> This should be done in close cooperation with organized labor to minimize unnecessary- and destructive- opposition. An employee's rights may only be taken away temporarily, but the corporation can still be held accountable if there is a pandemic.<sup>42</sup> Working from home may be a feasible choice for many individuals, but in the healthcare sector it is not realistic since it is critical to always have enough staff accessible.<sup>38</sup>

To protect vulnerable workers, healthcare leaders must put them in positions that allow them to work from home or in other settings where they are less exposed to the risk of pandemic. Maintaining productivity and efficiency when working from home might be more difficult since it needs more trust and more technology resources.<sup>9</sup> The healthcare leader also needs to figure out who will bear the cost of the new technology. Workers in some countries were awarded compensation for utilizing their infrastructure for their job.<sup>32</sup>

Ethical dilemmas may arise in the acute care sector during a pandemic when deciding on treatment options in emergency and critical care units.<sup>23</sup> Some healthcare employees may find themselves in circumstances where they have not been properly trained due to an increasing number of ill patients and a lack of resources (beds, respirators, etc.). It is important to meet all ethical principles of mental burden on medical practitioners.<sup>26</sup> Switzerland's guidelines underline the potential benefits of intensive care treatment for patients of all ages, no matter their age. Despite criticism that the

recommendations do not fully respect the desires of ill patients, they are commonly implemented.<sup>26</sup> On the other hand, the Italian guidelines emphasize that age is the determinant of having COVID-19 treatment.<sup>26</sup> Firms must give as many tools and solutions as possible to help workers create their coping mechanisms. Several factors contribute to a positive learning environment, including strong communication, fast quality of health and organizational rules, and a commitment to open and protected incentive systems.<sup>41</sup>

## Preparing for Unexpected

After a pandemic's first few weeks have passed, hospitals are faced with a tremendous, fast-growing, unpredictable workload. Resources (eg, retired staff, trainees, gear to protect the body) and a learning curve in adjusting treatment approaches to suit increased demand must be swiftly sourced and implemented.<sup>11</sup> Instead of aiming for a flawless solution that is too delayed, an organization could go for a useful but suboptimal option.<sup>19</sup> When a pandemic develops internationally, and manufacturers focus on a specific area or country, supplies of protective equipment (such as face masks) are depleted in many other countries, supply networks are suddenly disrupted, and the highly effective just-in-time manufacturing technique is put on hold when production ceases and transport systems become inaccessible.<sup>15</sup> Therefore, it is advisable to preserve critical commodities and look for supply chain diversification since they seem more vulnerable than previously thought.<sup>43</sup> Because of the growth in the cost of essential products, several western countries have had to re-import industrial equipment and expertise. In the case of a tragedy, each nation will look out for itself. This was proved by governments having protective equipment acquired by neighboring nations, even if those nations were friendly.<sup>9</sup>

With the peak of the first wave, the continuation of elective treatments must be arranged while considering the danger of a second wave and future waves.<sup>41</sup> During this planning, the healthcare leaders should document and consolidate all the actions that allowed healthcare leaders to deal with the pandemic. It is possible to compare the healthcare leadership necessary in these various stages to start-ups, which also follow this approach.<sup>44</sup>

Healthcare leaders should work in figuring out the secret to success through many trials and errors in the early stages to discover what works and does not. Workers need to approach their jobs systematically and document the strategies they use to deal with rising demand.<sup>35</sup> The healthcare leader's formula for success would be rendered outdated as soon as the new criteria would no longer fit original conditions. Regular analysis of the situation is essential for a smooth transition into the third phase.<sup>37</sup>

It is possible for healthcare leaders to have a substantial impact on how employees deal with a crisis by integrating communication, healthcare leadership, administration, and technology.<sup>19</sup> Healthcare leaders make the appropriate judgments at the appropriate times and communicate those choices in a manner that is clear, genuine, and simple to grasp.

## Updating Community About the Situation

The current COVID-19 epidemic threatens well-being, financial security, personal freedom, and privacy rights. It raises questions about the efficiency and accuracy of research. Healthcare leaders may learn from their mistakes since it exposes the weaknesses in their communication, healthcare leadership, planning, and flexibility. Media technologies and marketing channels can quickly disseminate erroneous or harmful information, but they can quickly disseminate critical news and suggestions.<sup>27</sup> Public opinion is largely shaped by the work of writers and the publications they publish.<sup>45</sup> Healthcare leadership must resist the urge to ignore best practices in clinical care and publish preliminary results before being properly peer-reviewed.<sup>46</sup> For communication to be successful, it must be clear and honest.

## Recommendations

Many recommendation to overcome the challenges were faced by healthcare leader. These include built on communication skills. Common tactics for creating a fruitful dyadic partnership. The relationship must start with a purposeful conversation about how agreements will be made, how to communicate effectively, and how to resolve differences. The authors also stress the significance of 1) clarity around tasks and responsibilities that are recognized and owned individually, and 2) putting on a united front entails discussion and negotiation beforehand, leaving any unresolved issues between the two leaders, and conveying the same message. Finally, knowing that we are sometimes the learner and

sometimes the supervisor in all circumstances helps the leaders recognize and value each other's distinctive experience. Healthcare leader must establish a culture of openness and transparency in order to promote a secure workplace. They must also guarantee that staff members are properly trained to deliver safe care. Systems for reporting and looking into mistakes are also crucial. The protection of patients from danger depends on safety culture. Healthcare leaders need to be prepared to cope with a labor shortage by coming up with creative methods for attracting and keeping workers. They must also be prepared to equip staff with the skills necessary to deliver high-quality care.

## Conclusion

First and foremost, the current pandemic has brought forth a slew of initiatives to prevent the spread of the disease and prepare for the future. This new situation of the pandemics needs the leaders in the healthcare system to face many challenges. These challenges include being manager of the care, making decisions, caring for employees, preparing for the unexpected, updating the community about the situation.

## Funding

Jordan University of Science and Technology.

## Disclosure

The author reports no conflict of interest in this work.

## References

1. Abuhammad S, Alzoubi KH, Khabour O. Fear of COVID-19 and stigmatization towards infected people among Jordanian people. *Int J Clin Pract.* 2021;75(4):e13899. doi:10.1111/ijcp.13899
2. Abuhammad S. Violence against Jordanian women during COVID-19 outbreak. *Int J Clin Pract.* 2021;75(3):e13824. doi:10.1111/ijcp.13824
3. Abuhammad S, AlAzzam M, Mukattash T. The perception of nurses towards their roles during the COVID-19 pandemic. *Int J Clin Pract.* 2021;75(4):e13919. doi:10.1111/ijcp.13919
4. AlAzzam M, Abuhammad S, Abdalrahim A, Hamdan-Mansour AM. Predictors of depression and anxiety among senior high school students during COVID-19 pandemic: the context of home quarantine and online education. *J School Nurs.* 2021;37(4):241–248. doi:10.1177/1059840520988548
5. Abuhammad S, Khabour OF, Alomari MA, Alzoubi KH. Depression, stress, anxiety among Jordanian people during COVID-19 pandemic: a survey-based study. *Inf Med Unlocked.* 2022;30:100936. doi:10.1016/j.imu.2022.100936
6. Abuhammad S. Barriers to distance learning during the COVID-19 outbreak: a qualitative review from parents' perspective. *Heliyon.* 2020;6(11):e05482. doi:10.1016/j.heliyon.2020.e05482
7. AlAzzam M, Abuhammad S, Tawalbeh L, Dalky H. Prevalence and correlates of depression, anxiety, and suicidality among high school students: a national study. *J Psychosoc Nurs Ment Health Serv.* 2021;59(8):43–51. doi:10.3928/02793695-20210426-02
8. Muflih SM, Al-Azzam S, Abuhammad S, Jaradat SK, Karasneh R, Shawaqfeh MS. Pharmacists' experience, competence and perception of telepharmacy technology in response to COVID-19. *Int J Clin Pract.* 2021;75(7):e14209. doi:10.1111/ijcp.14209
9. Van Barneveld K, Quinlan M, Kriesler P, et al. The COVID-19 pandemic: lessons on building more equal and sustainable societies. *Econ Labour Relat Rev.* 2020;31(2):133–157. doi:10.1177/1035304620927107
10. Abuhammad S, Alzoubi KH, Al-Azzam S, et al. Stigma toward healthcare providers from patients during COVID-19 era in Jordan. *Public Health Nurs.* 2022. doi:10.1111/phn.13071
11. Van Dorn A, Cooney RE, Sabin ML. COVID-19 exacerbating inequalities in the US. *Lancet.* 2020;395(10232):1243. doi:10.1016/S0140-6736(20)30893-X
12. Alrabadi N, Bany-Melhem S, Alzoubi KH, et al. COVID-19 vaccination hesitancy: a review of the literature and recommendations. *Curr Rev Clin Exper Pharmacol.* 2022;17. doi:10.2174/2772432817666220512112913
13. Abuhammad S. Attitude of pregnant and lactating women toward COVID-19 vaccination in Jordan: a cross-sectional study. *J Perinat Med.* 2022. doi:10.1515/jpm-2022-0026
14. Villar RC, Nashwan AJ, Mathew RG, et al. The lived experiences of frontline nurses during the coronavirus disease 2019 (COVID-19) pandemic in Qatar: a qualitative study. *Nurs Open.* 2021;8(6):3516–3526. doi:10.1002/nop2.901
15. Wilson S. Pandemic leadership: lessons from New Zealand's approach to COVID-19. *Leadership.* 2020;16(3):279–293. doi:10.1177/1742715020929151
16. Ahlsson A. Why change? Lessons in leadership from the COVID-19 pandemic. *Eur J Cardio Thorac Surg.* 2020;58(3):411–413. doi:10.1093/ejcts/ezaa252
17. Cuomo A. *American Crisis: Leadership Lessons from the COVID-19 Pandemic.* Crown; 2020.
18. World Health Organization. Coronavirus disease (COVID-19): situation report, 203; 2020.
19. Kaul V, Shah VH, El-Serag H. Leadership during crisis: lessons and applications from the COVID-19 pandemic. *Gastroenterology.* 2020;159(3):809–812. doi:10.1053/j.gastro.2020.04.076
20. Hirpara DH, Taylor B. Leadership proficiency in surgery: lessons from the COVID-19 pandemic. *Can J Surg.* 2020;63(3):E229. doi:10.1503/cjs.006020



21. Bradbury-Jones C, Isham L. The pandemic paradox: the consequences of COVID-19 on domestic violence. *J Clin Nurs*. 2020;29(13–14):2047–2049. doi:10.1111/jocn.15296
22. Mojahed A, Brym S, Hense H, et al. Rapid review on the associations of social and geographical isolation and intimate partner violence: implications for the ongoing CoViD-19 pandemic. *Front Psychiatry*. 2021;12:486. doi:10.3389/fpsy.2021.578150
23. Jaziri R, Alnahdi S. Choosing which COVID-19 patient to save? The ethical triage and rationing dilemma. *Ethics Med Public Health*. 2020;15:100570. doi:10.1016/j.jemep.2020.100570
24. Edmondson AC. What hospitals overwhelmed by COVID-19 can learn from startups. *Harvard Business Review*; 2020: 22.
25. Rowan NJ, Laffey JG. Challenges and solutions for addressing critical shortage of supply chain for personal and protective equipment (PPE) arising from Coronavirus disease (COVID19) pandemic—Case study from the Republic of Ireland. *Sci Total Environ*. 2020;725:138532. doi:10.1016/j.scitotenv.2020.138532
26. Mascha EJ, Schober P, Schefold JC, Stueber F, Luedi MM. Staffing with disease-based epidemiologic indices may reduce shortage of intensive care unit staff during the COVID-19 pandemic. *Anesth Analg*. 2020;131(1):24. doi:10.1213/ANE.0000000000004849
27. Devakumar D, Shannon G, Bhopal SS, Abubakar I. Racism and discrimination in COVID-19 responses. *Lancet*. 2020;395(10231):1194. doi:10.1016/S0140-6736(20)30792-3
28. Kerrissey MJ, Edmondson AC. What good leadership looks like during this pandemic. *Harv Bus Rev*. 2020;13:1.
29. Hofmeyer A, Taylor R. Strategies and resources for nurse leaders to use to lead with empathy and prudence so they understand and address sources of anxiety among nurses practising in the era of COVID-19. *J Clin Nurs*. 2021;30(1–2):298–305. doi:10.1111/jocn.15520
30. Editors. Dying in a leadership vacuum. *N Engl J Soc Behav Sci*. 2020;383(15):1479–1480. doi:10.1056/NEJMe2029812
31. Aagaard EM, Earnest M. Educational leadership in the time of a pandemic: lessons from two institutions. *FASEB BioAdv*. 2021;3(3):182–188. doi:10.1096/fba.2020-00113
32. Basir KH, Rahman UF. Pandemic leadership: lessons learnt from a small state of Brunei Darussalam. *Int J Public Leadersh*. 2021. doi:10.1108/IJPL-09-2020-0089
33. Stephenson AL, Sullivan EE, Hoffman AR. Primary care physician leaders' perspectives on opportunities and challenges in healthcare leadership: a qualitative study. *BMJ Leader*. 2022;3:leader-2022-000591.
34. Denis J-L, van Gestel N. Medical doctors in healthcare leadership: theoretical and practical challenges. *BMC Health Serv Res*. 2016;16(2):45–56. doi:10.1186/s12913-016-1392-8
35. Georgiades C. Leadership lessons from prior pandemics: turning the coronavirus disease 2019 (COVID-19) pandemic into an opportunity. *J Am Coll Radiol*. 2020;17(7):906–908. doi:10.1016/j.jacr.2020.04.027
36. Abuhammad S, Khabour OF, Alzoubi KH, El-zubi F, Hamaieh SH. Respiratory infectious diseases and adherence to nonpharmacological interventions for overcoming COVID-19 pandemic: a self-reported study. *Int J Clin Pract*. 2022;2022:5.
37. Starr JP. On Leadership: responding to COVID-19: short-and long-term challenges. *Phi Delta Kappan*. 2020;101(8):60–61.
38. Hartwell CA, Devinney T. Populism, political risk, and pandemics: the challenges of political leadership for business in a post-COVID world. *J World Bus*. 2021;56(4):101225. doi:10.1016/j.jwb.2021.101225
39. Henry Akintobi T, Jacobs T, Sabbs D, et al. Community engagement of African Americans in the era of COVID-19: considerations, challenges, implications, and recommendations for public health. *Prev Chronic Dis*. 2020;17:E83. doi:10.5888/pcd17.200255
40. Abuhammad S, Khabour OF, Alzoubi KH. COVID-19 contact-tracing technology: acceptability and ethical issues of use. *Patient Prefer Adherence*. 2020;14:1639. doi:10.2147/PPA.S276183
41. Spivack LB, Spivack M. Understanding and adapting to leadership challenges: navigating the COVID-19 crisis in the Bronx. *Am J Crit Care*. 2021;30(1):80–82. doi:10.4037/ajcc2020537
42. Thambusamy RX, Bekiroğulları Z. Virtual leadership in small businesses during the COVID-19 pandemic: challenges and possibilities. *Eur J Soc Behav Sci*. 2020;29(3):179–190. doi:10.15405/ejsbs.281
43. Bhalla A. Leadership challenges and the COVID-19 pandemic. *ORF Occasional Paper*; 2021: 299.
44. Dalky H, Khraisat A, Khalifa A, Abuhammad S, Hamdan-Mansour A. Predictors of social response to COVID-19 among health care workers caring for individuals with confirmed COVID-19 in Jordan. *F1000Research*. 2022;11(312):312. doi:10.12688/f1000research.75740.2
45. Hamadani JD, Hasan MI, Baldi AJ, et al. Immediate impact of stay-at-home orders to control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: an interrupted time series. *Lancet Global Health*. 2020;8(11):e1380–e9. doi:10.1016/S2214-109X(20)30366-1
46. Akhtaruzzaman M, Boubaker S, Umar Z. COVID-19 media coverage and ESG leader indices. *Fin Res Lett*. 2022;45:102170. doi:10.1016/j.frl.2021.102170

## Journal of Healthcare Leadership

Dovepress

### Publish your work in this journal

The Journal of Healthcare Leadership is an international, peer-reviewed, open access journal focusing on leadership for the health profession. The journal is committed to the rapid publication of research focusing on but not limited to: Healthcare policy and law; Theoretical and practical aspects healthcare delivery; Interactions between healthcare and society and evidence-based practices; Interdisciplinary decision-making; Philosophical and ethical issues; Hazard management; Research and opinion for health leadership; Leadership assessment. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/journal-of-healthcare-leadership-journal>