Editorial

COVID-19 Pandemic as a Catalyst for Healthcare Transformation: Finding the Silver Lining in a Global Catastrophe

Abdul Rahman Jazieh

Department of Oncology, King Saud bin Abdulaziz University for Health Sciences and King Abdullah International Medical Research Center, Riyadh, Saudi Arabia

Address correspondence to Abdul Rahman Jazieh (jaziehoncology@gmail.com)

In the Spring of 2020, the disruption of healthcare delivery by the coronavirus disease 2019 (COVID-19) pandemic was unprecedented by its severity and magnitude. The pandemic overwhelmed healthcare systems globally, driving some to the verge of collapsing and resulting in many fatalities. In some areas, healthcare systems were not able to handle the surge of acutely ill patients in need of respiratory critical care and therefore, were unable to cope with increasing demand for hospital beds, equipment, staffing, and more. The overburdened systems compromised the care of patients with COVID-19 as well as those with other acute illnesses and chronic diseases. Furthermore, due to the risk of infection, many sick patients avoided seeking medical help during the pandemic. As a result, many patients did not receive the required care on time for their ailments. According to the World Health Organization report in June 2020, more than half (53%) of the countries surveyed partially or completely disrupted services for hypertension treatment; 49% for treatment for diabetes and diabetes-related complications; 42% for cancer treatment; and 31% for cardiovascular emergencies during the COVID-19 pandemic.[1]

With more than 19,434,220 infected people and 722,303 fatalities worldwide by August 8, 2020, the toll of the COVID-19 pandemic has continued to rise with no apparent end in the foreseeable future.[2]

Although it brought a large-scale negative impact on healthcare at individual and system levels, like any major crisis, the COVID-19 pandemic presented an opportunity for healthcare transformation and the creation of a better system.

This article aims to answer these two questions: Why does the pandemic represent a great opportunity for healthcare improvement, and how can we capitalize on this opportunity to get the maximum positive outcome?

WHAT DID WE LEARN FROM THE PANDEMIC?

The pandemic revealed many of the systems' faults and uncovered opportunities for improvement.[3] The following are some of the lessons learned from the pandemic:

1. The existing public healthcare system is not adequate, with major deficiencies in managing various aspects of public health concerns, especially in the field of communicable diseases. This was apparent by the incoherent approach to managing the pandemic in many countries.
2. Acute care facilities lack adequate infrastructure and resources to cope with a sharp surge of critically ill cases.
3. The system is not efficient and overloaded with redundant and nonessential elements and processes. For example, the crisis revealed that many clinic visits, laboratory tests, and diagnostic procedures can be safely postponed or even canceled for many patients.
4. Caring for the healthcare staff is critical for the system's optimal performance. As front liners in managing the pandemic, healthcare staff requires a great deal of attention to manage the multiple risks they encounter.

HOW CAN WE TAKE ADVANTAGE OF THE CRISIS TO BUILD A BETTER SYSTEM?

It is extremely critical that the sacrifices of healthcare workers, patients, their families, and the society at large be heeded and translated into a powerful catalyst for a positive change in healthcare. Many of these changes are

Table 1.—Challenges and proposed interventions to transform healthcare systems post COVID-19

Existing Approach Challenge	Transformative Approach	Examples/Components
System focus is care provision for existing acute and chronic illnesses	Change the model of care ("New normal in healthcare")	- Predictive, preventive, and personalized care - Population-based approach - Care near home - Primary care-based
Wasted resources and redundancy/lack of resources	Evaluate all major processes and resource utilization	- Process re-engineering - Eliminate redundancy
Increased risk for staff to be physically and mentally harmed	Establish structured support care program	- Identify early signs of burnout or emotional disturbance - Early intervention through existing and accessible programs - Use online and remote help
Challenges in research and development	Enhance collaborative research initiatives and modify research approach	- Large scale cross-borders collaborations - Modify how clinical trials are conducted - Facilitate innovation-based study

COVID-19, coronavirus disease 2019

well underway creating a "new normal" in healthcare, dictated by the pandemic's impact.[4] The following points identify some of the available opportunities to create a better healthcare for the future (Table 1).

1. Change the model of care from an approach to manage existing acute and chronic illnesses to a more preventive, predictive, population-based approach. Emphasize global health, public health, primary care, and care near home.[5]
2. Create lean organizations by removing redundancy, reengineering processes, eliminating waste, using technology, and offering remote care.[6,7]
3. Promote staff care and welfare with programs that recognize early signs of staff concerns and address them in a timely manner.[8]
4. Encourage research and innovation. Although it proved to be a major challenge to existing research studies, the pandemic created a great opportunity to introduce new initiatives and large-scale collaborations in addition to enhancing the use of technology and innovations.[9,10] Transforming the processes of research and development based on the gained experience during the pandemic will likely be beneficial in the long run.

Finally, we need to remember that one size will not fit all, and every system must adopt changes that are suitable to its setting as well as the economic and political status of the region. The success of the transformation is dependent on many variables including political, regulatory, and financial factors.

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