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# Navigating Uncharted Waters: The Disruption and Resilience of Elective Surgery Amidst the COVID-19 Pandemic in Lebanon

Hayat Akoum<sup>1</sup>, Elias M. Choueiri<sup>2</sup>, and Hikmat Akoum<sup>1\*</sup>

<sup>1</sup> Professor, Faculty of Public Health, Lebanese University, Lebanon

<sup>2</sup> WSO Board Member and Liaison Officer to the United Nations;  
Professor at several Lebanese universities

## KEYWORDS

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## ABSTRACT

The COVID-19 pandemic ushered in previously unseen difficulties across the entirety of the world's healthcare system, dramatically reshaping several facets of clinical medicine in the process. Among the industries that were hit particularly hard was elective surgery, which is a fundamental component of medical systems all across the world. In the present study, we investigate the complex relationship between the widespread COVID-19 epidemic and the effects that it has had on elective surgery in the particular setting of Lebanon. This paper seeks to provide insights that can inform future healthcare preparedness and contribute to the ongoing efforts to build a resilient healthcare system that is capable of effectively navigating crises while ensuring the delivery of essential medical services by examining the challenges, adaptations, and implications. The goal of this paper is to provide these insights by examining the challenges, adaptations, and implications.

## 1. INTRODUCTION

As a result of the unprecedented global upheaval caused by the COVID-19 pandemic, healthcare systems all over the world faced significant challenges. Elective surgery is one of the industries deeply impacted by change. This requires a complete reevaluation of existing healthcare practices and priorities. This study examines the complex relationship between COVID-19 and elective surgeries in Lebanon.

Lebanon's healthcare system has relied on elective surgeries to manage chronic illnesses and improve patients' health and quality of life. Hip replacements, aesthetic treatments, and cardiac procedures have improved health and lowered costs. COVID-19 presented a new challenge to global healthcare systems. Quick, vital decisions were needed to manage resources. As in many countries, elective treatments were postponed in Lebanon to focus on COVID-19 patients and limit viral spread in healthcare institutions. This was done because several countries stopped elective treatments. The nation's healthcare priorities shifted after this suspension exposed the necessity to deploy beds, personnel, and medical equipment to meet epidemic demands. As the crisis deteriorated, these suspensions' effects

\* Corresponding Author: h\_akoum@yahoo.com

became clear. The elective surgery backlog complicated patient care, resource allocation, and surgical scheduling. This backlog made healthcare providers slower to intervene and required novel patient prioritization (Khalife, 2022).

Postponing elective surgeries had a major impact on the budget. Lack of these therapies caused hospitals and medical staff to lose a lot of money, which affected their financial stability and ability to provide quality care. Delayed treatments also increased the financial burden and the possibility of rising healthcare expenses. Healthcare practitioners and institutions quickly implemented changes and innovations in response to the changing environment. Telemedicine and virtual consultations are essential for pre-surgical evaluations and remote patient care. This reduces the number of times patients must see their doctors while ensuring continuous medical care. Strict safety and infection control standards have changed surgical methods. Changes were made to protect patients and healthcare workers. The pandemic's psychological and emotional impact on patients and healthcare workers highlighted its numerous effects. Due to concerns about getting the virus during medical care and the postponement of their procedure, patients felt more anxious and apprehensive. Managing patient care while ensuring their own and their families' well-being caused stress for healthcare professionals (Khalife, 2022).

The lessons that can be learned from this experience have significant ramifications for the development of future healthcare systems and emergency preparedness measures. In order for Lebanon to strengthen the resilience of its healthcare system, it is necessary for the country to adopt adaptability in the process of anticipating and responding to crises, cultivate transparent communication in order to guide decision-making, and cultivate collaborative approaches that transcend both institutional and geographical boundaries. This paper, therefore, navigates the intricate terrain of the COVID-19 pandemic's impact on elective surgeries in Lebanon, offering, in sections 2 to 7, insights into the challenges faced, the adaptations undertaken, and the pathways towards a more resilient and adaptable healthcare landscape (Bez et al., 2020; Bitar et al., 2020; Cheaito et al., 2020; Moujaess et al., 2020; Sabbagh Dit Hawasli et al., 2020; Abu Shakra et al., 2021; Albaini et al., 2021; Al-Riyami et al., 2021; Bizri et al., 2021; Hajjar et al., 2021; Hassan et al., 2020; Karak et al., 2021; Mjaess et al., 2021; Moussa et al., 2021; Bizri et al., 2022; Noureldin et al., 2022; Khalife, M., 2022; Downey et al., 2023; Seif Rabiei et al., 2023). The information that is presented here is meant to be illustrative and is in no way meant to be thorough; nevertheless, it does cover the most important aspects.

## **2. BEFORE THE PANDEMIC, EXPLOSION OF ELECTIVE SURGERY IN LEBANON'S LANDSCAPE**

Before the COVID-19 pandemic, medical breakthroughs, patient needs, and healthcare infrastructure shaped Lebanon's elective surgery environment. Preexisting healthcare systems in the country had this dynamic interaction. The nation's healthcare system relies on elective surgery to manage acute, chronic, and quality-of-life issues. These processes addressed many difficulties. Elective surgeries included life-improving cosmetic surgery, joint replacements, and heart treatments. These planned interventions, unlike emergency procedures, were meticulously organized, allowing healthcare facilities to allocate resources and patients to prepare.

The relevance of optional interventions in Lebanon's healthcare system can be attributed to a wide variety of contributing variables. They offered vital medical care for chronic disorders, such as orthopedic issues, cataracts, and cardiac conditions, which frequently required rapid intervention to prevent exacerbation and deterioration. These conditions included cataracts and orthopedic problems. In addition, elective procedures have a substantial impact on the overall quality of life of patients by

enabling them to regain mobility, ease discomfort, and reclaim their functional independence. The numbers collected before the pandemic provided evidence of the vital role that elective procedures played in Lebanon's healthcare system. Patients are guaranteed to receive personalized and highly specialized care thanks to the fact that hospitals and other types of medical facilities have committed particular departments and employees to the conduct of elective procedures. These surgical treatments had a major economic contribution, which contributed to the revenue streams of healthcare institutions and helped facilitate the continuous investment in medical infrastructure and technology.

In addition, elective surgeries were a major contributor to Lebanon's success in luring medical tourists. Patients from the surrounding areas and further afield often go to this country for elective treatments because of its well-deserved reputation for offering high-quality medical care. In addition, the country's healthcare experts and facilities are among the most advanced in the world. The increase in patients not only helped to strengthen the nation's healthcare business, but it also helped to strengthen the economy. Prior to the pandemic, the elective surgical scene in Lebanon was defined by a dynamic equilibrium between patient demand, physician knowledge, and institutional capacity. This dynamic equilibrium existed before the pandemic. The well-established structure not only enabled patients to have access to vital care and improve their overall health, but it also made a substantial contribution to Lebanon's standing in the medical landscape of the surrounding region. However, the introduction of the COVID-19 pandemic threw this equilibrium off, which led to a paradigm shift in the priority placed on healthcare and a set of issues that had never been seen before, necessitating the development of fresh reactions and flexible strategies.

### **3.       DISRUPTION OF ELECTIVE SURGERIES DURING COVID-19**

The COVID-19 epidemic created a seismic shift in the topography of elective operations in Lebanon, which in turn triggered a cascade of repercussions that echoed across the country's healthcare systems as well as among medical personnel and patients. As a vital response to the enormous challenges faced by the pandemic, governments and healthcare authorities attempted to protect public health and prioritize resources for controlling the viral epidemic. As a result, elective procedures were put on hold until the pandemic could be brought under control. There were a variety of factors that led to the termination of elective surgical procedures. Hospitals and other medical facilities were ordered to stop performing non-emergency treatments after the government issued regulations and recommendations requiring them to do so. This allowed for the reallocation of resources, manpower, and critical care capacities in order to meet the growing demands of COVID-19 patients. These precautions had to be taken because there was an immediate need to prepare healthcare facilities for the possibility of an epidemic of COVID-19 and to lessen the likelihood that patients would be exposed to the virus while they were in the hospital. Although this moratorium was necessary for preventing further transmission of the virus, it did have a substantial impact on both the patients and the medical staff. Patients who needed immediate treatment for medical issues that weren't immediately life-threatening but still required it felt fear, anxiety, and uncertainty. Delays in treatments such as joint replacements and tumor removals had the potential to make patients' existing medical issues worse and had a detrimental influence on the patients' overall health and well-being.

Within a short amount of time, healthcare organizations reorganized their priorities. The operating rooms that had been set aside for elective surgeries were swiftly reallocated to treat patients affected by COVID-19. In order to meet the difficulties of the pandemic, vital resources such as personal protective equipment (PPE), ventilators, and medical professionals were diverted. Despite the fact that it was necessary, the reallocation of these resources presented a challenge to the existing healthcare ecosystem and required a prompt reaction from the various institutions. Infection control concerns were another

factor that led to the postponement of elective procedures. During surgical procedures, the close contact between patients and healthcare staff raised the potential for viral transmission. Because of this heightened risk, a cautious approach was required in order to prevent infections that were not planned. The difficulties of restarting surgical procedures were compounded by the need to reevaluate surgical protocols, sterile practices, and post-operative care in order to protect both patients and medical staff. This was necessary in order to ensure that everyone would be safe.

The move from economic concerns to healthcare delivery unexpectedly affected the economy. Hospitals, surgical teams, and other medical professionals lost significant money when elective treatments were stopped. Due to financial constraints, institutions had to find new means to produce resources while continuing surgical procedures during a pandemic. The COVID-19 epidemic disrupted elective surgeries in Lebanon, illustrating the global need to reconcile crisis response and healthcare conservation. The sickness needed to be stopped by striking this balance. It was vital to cease elective surgeries to preserve public health and allocate resources, but doing so faced issues beyond clinical considerations. Rethinking patient care, surgical procedures, resource allocation, and strategic decision-making was needed to overcome this upheaval. Each of these factors shaped Lebanon's healthcare throughout an exceptional crisis.

#### 4. IMPACT ON PATIENTS AND THE HEALTHCARE SYSTEM

The COVID-19 pandemic disrupted healthcare delivery, patient outcomes, and financial stability in Lebanon. This disruption had a significant impact on both patients and the healthcare system.

- **Delayed and Postponed Surgeries:** A considerable number of procedures were either delayed or postponed. Patients who required therapies for chronic diseases, pain alleviation, or improved quality of life were tormented by uncertainty. Many patients who had their procedures postponed had a deterioration of their health problems, which ranged from greater pain and suffering to the likely advancement of their disease. This was in addition to the temporary inconvenience that the postponement caused.
- **Accumulation of Surgical Backlog:** The suspension of elective surgeries has led to a rising accumulation of cases, which presents a substantial issue for healthcare facilities. In order to resolve the existing backlog, careful triage and prioritization of patients were required, with the criteria being medical urgency and the likelihood of suffering injury as a result of the delay. Administrators and surgical teams were faced with the formidable problem of juggling the competing needs of patients who were waiting for postponed surgery and new patients who required emergency assistance.
- **Financial Implications:** The disruption of elective procedures resulted in major income losses for medical institutions and practitioners. This has repercussions for the finances of the healthcare industry. These treatments were an essential source of revenue for hospitals, which enabled them to maintain high standards of patient care and make investments in the expansion of medical facilities. Patients frequently faced additional costs as a result of delayed therapies as well as the demand for continued medical management as a consequence of their condition.
- **Adaptation and Resource Allocation:** In order to combat the epidemic and manage the backlog of postponed surgeries, the healthcare system needed to quickly respond to the new reality by reallocating resources. This modification required the making of strategic decisions in order to guarantee the judicious and efficient use of the resources that were available. In

order to address the needs of COVID-19 patients as well as those of patients who required elective surgery, it was necessary to allocate resources in a way that struck a delicate balance.

- **Patient Psychological Impact:** This effect extended to both the patients' mental and emotional well-being. Patients who had their surgeries postponed had a heightened level of anxiety, uncertainty, and mental suffering as a result. The fact that it was unclear when they would receive the necessary care added another layer of complexity to a situation that was already challenging.
- **Healthcare Provider Strain:** People who work in the healthcare business have the dual responsibility of ensuring that patients receive exceptional care while also watching out for their personal well-being. Taking care of patients infected with COVID-19, managing postponed surgeries, and watching out for their personal safety all took a toll on their mental and emotional well-being. The difficulties of the work they do on the job make healthcare professionals feel more stressed and exhausted in emergency situations.
- **Backlog Management Strategies:** In order to handle the surgical backlog, novel strategies were required. Prioritizing patients, maintaining efficient schedules, and ensuring patient safety were all considerations that healthcare facilities needed to make in order to effectively implement infection control measures. Collaboration among the surgical teams, the use of virtual consultations, and the optimization of operating room schedules were all critical components in the successful management of the accumulating cases.

In addition to procedural delays, the influence of COVID-19 on elective surgeries in Lebanon extended to the health of patients, the financial stability of healthcare institutions, the distribution of resources, and the emotional well-being of patients as well as healthcare staff. This event brought to light the necessity of flexible healthcare systems that are able to adjust to obstacles that were not foreseen, all while preserving patient-centered treatment and encouraging intervention measures for potential future healthcare crises.

## 5. ADAPTATIONS AND INNOVATIONS

The COVID-19 pandemic in Lebanon caused a disruption in elective surgery, which in turn spurred a flood of adaptations and advances in the medical field. In order to successfully traverse the fast-shifting environment of patient care and surgical procedures in the face of unprecedented challenges, healthcare institutions, medical personnel, and patients alike have all begun to implement innovative tactics.

- **Telemedicine and Virtual Consultations:** The introduction of telemedicine and virtual consultations marked a key turning point in preoperative examinations and the contacts between doctors and their patients. Patients were able to obtain consultations and have discussions about surgery plans through the use of digital platforms, which allowed healthcare experts to do remote evaluations and eliminate the need for in-person visits. This invention not only reduced the hazards of exposure but also sped up the process of decision-making, which ensured that patients received prompt medical care.
- **Stringent Safety Protocols and Infection Control Measures:** In response to the necessity of infection control, considerable modifications were made to surgical practices. These changes included both the protocols and the measures that were put in place to prevent infection. The possibility of a virus being passed from patient to patient has led to the implementation of stringent safety precautions. These protocols include stricter processes for sterilization, an increase in the usage of personal protective equipment (PPE), and alterations to surgical



procedures. In the operating room, the safety of both patients and members of the medical staff was improved as a result of these precautions.

- **Phased Resumption of Elective Surgeries:** As the nature of the pandemic changed throughout the course of its progression, medical facilities began to implement a strategy that involved gradually restarting elective surgical procedures. Criteria were painstakingly devised in order to prioritize cases in accordance with medical urgency, the risk of injury caused by delays, and the availability of resources. The surgical backlog was supposed to be cleared up with the help of this strategic resumption, and while doing so, patient safety and compliance with infection control laws were to be maintained.
- **Virtual Surgical Training and Education:** The field of medicine has embraced the use of virtual platforms for educational and training purposes in surgical procedures. Surgeons and other medical professionals were able to continue sharpening their abilities and staying up-to-date with the most recent breakthroughs in surgical techniques and procedures by participating in virtual seminars, conferences, and training sessions.
- **Innovative Operating Room Layouts:** These modifications were made to the operating room layouts in order to ensure that there is a physical separation between patients undergoing surgical procedures and to limit the danger of viral transmission. Ingenious spatial arrangements were put into place so that members of the surgical team could maintain safe distances from one another while still maximizing the efficiency of the workflow and the accessibility of the equipment.
- **Hybrid Care Models:** These new models of care mix in-person consultations and interventions with remote monitoring and follow-up. Hybrid models of care are becoming increasingly popular. This technique not only decreased the number of times patients visited healthcare institutions, but it also streamlined the paths via which patients received care, which led to an increase in the effective utilization of available resources.
- **Digital Health Records and Communication:** During the pandemic, electronic medical records took on an increased level of significance. Streamlining communication and information exchange between patients, healthcare professionals, and the many departments became essential in order to sustain coordinated care and facilitate effective decision-making.

The accumulation of these shifts in practice and the introduction of new procedures resulted in a shift in the nature of elective surgery in Lebanon. They brought attention to the durability of the healthcare business in the face of unprecedented problems, demonstrating the sector's ability to deploy adaptive solutions that strike a balance between the requirements of patients, worries about their safety, and the most effective use of available resources. These innovations not only addressed urgent difficulties but also paved the way for future breakthroughs in healthcare delivery and patient care. As a result, they provided significant knowledge on handling crises while maintaining a high level of medical service.

## 6. IMPACT ON ONE'S PSYCHOLOGICAL AND EMOTIONAL STATE

The COVID-19 pandemic disrupted elective operations, casting a shadow beyond the physical world. This shadow damaged Lebanon's patients and healthcare workers' mental and emotional health. Unexpected challenges and uncertainties caused fresh stressors during the pandemic. These pressures have enhanced psychological and emotional effects across the healthcare system.

- **Patient Anxiety and Uncertainty:** The epidemic increased fear and unpredictability among elective surgery patients. Many of them had to decide whether to undergo the required surgery due to concerns about hospital virus exposure. Not knowing when their postponed operations would take place increased their anxiety.
- **Coping with Surgery Postponements:** Postponing procedures caused patients emotional distress as they tried to cope with the consequences. Their mental health suffered from the indefinite postponement of pain alleviation, quality of life, or physical improvement. Patients' psychological stress rose due to the long waiting period because they couldn't estimate when their surgeries would be.
- **Healthcare Provider Stress:** The healthcare industry also experienced a significant amount of mental strain as a result of the epidemic. The emotional strain that was placed on medical workers as a result of the necessity of balancing the care of patients with the inherent hazards of getting the virus itself was significant. Due to constant exposure to patients' suffering and the difficulties of managing COVID-19 cases, healthcare workers' mental health and general well-being suffered.
- **Emotional Burden of Witnessing Suffering:** The emotional toll that was taken on healthcare providers as a result of having to witness the suffering of patients whose surgeries had to be postponed was significant. These professionals had to bear the emotional weight of seeing the impacts of these delays directly. The empathy that exists between patients and medical professionals sheds light on the moral challenges and emotional strain that those who are in charge of managing patient care face.
- **Managing Personal Safety and Patient Care:** Healthcare personnel face everyday challenges in striking a balance between providing care for patients and protecting their own safety. The necessity of maintaining stringent infection control measures and the employment of personal protective equipment (PPE) while providing quality care provided an additional layer of tension and mental strain for medical personnel as they juggled their dual obligations for the well-being of patients and for self-preservation.
- **Psychological Resilience and Support:** In spite of the challenges, the pandemic brought to light the tremendous psychological resilience that patients and medical workers displayed during the outbreak. Patients adapted to the new reality by seeking emotional support from their families, friends, and the professionals who work in the healthcare industry. Camaraderie, collaborative efforts, and support networks provided medical professionals with a sense of consolation within their professional groups.
- **Importance of Mental Health Care:** The epidemic brought to light the crucial need for successfully meeting mental health care standards. Patients and healthcare practitioners alike have stressed the importance of having readily available mental health support, counseling, and tools to assist in managing the emotional complications of postponed procedures and the greater challenges brought by the pandemic.

During the COVID-19 pandemic, the disruption of elective interventions had a significant psychological and emotional impact, which cannot be overstated. The postponed procedures caused patients as well as healthcare workers to experience anxiety, uncertainty, and a strain on their emotional well-being. This experience brought to light the necessity of providing comprehensive support for mental health as well as the value of offering resources to aid individuals in coping with the challenges provided by unprecedented crises, with the ultimate goal of boosting the health of patients and healthcare personnel.

## 7. PREPARATION FOR THE FUTURE AND LESSONS TO BE LEARNED

The COVID-19 pandemic in Lebanon caused a disruption in elective surgeries, which brought to light the critical importance of future preparedness and conveyed invaluable lessons that will help the healthcare landscape navigate similar challenges and emerge more resilient in the face of uncertainty.

- **Building Flexible Healthcare Systems:** One of the most significant takeaways from this experience is the significance of adding inherent flexibility to healthcare systems. Being ready for unanticipated emergencies requires having the ability to rapidly adjust to changing conditions, such as redistributing resources, reusing facilities, and adapting care delivery methods to accommodate shifting needs.
- **Effective Communication and Information Dissemination:** It quickly became clear that the foundation of efficient crisis management was clear and concise communication. In the event of future crises, appropriate solutions will need to include the formulation of open rules for the restarting of elective surgical procedures, the transmission of truthful information to patients, and the education of the general public about preventative measures. By ensuring that both patients and healthcare practitioners are well-informed and on the same page, this promotes a sense of confidence and compliance in the healthcare system.
- **Collaborative Approaches and Partnerships:** The epidemic brought to light the usefulness of collaborative approaches. The exchange of resources, knowledge, and skills was made easier as a result of both international cooperation and public-private partnerships. Fostering collaborations between government agencies, healthcare institutions, medical associations, and other stakeholders in order to increase the community's overall capacity to respond quickly and effectively to emergencies is one way to accomplish this goal.
- **Surge Capacity Planning:** It is absolutely necessary to plan for surge capacity in order to deal with sudden interruptions like pandemics. In order for hospitals to rapidly increase their capacities, they need to be able to transform regular wards into intensive care units, hire extra staff, and obtain the appropriate equipment. These plans ensure that healthcare institutions are able to absorb a rise in the number of patients without compromising the quality of care that they provide.
- **Resilience in the Healthcare Workforce:** During the course of the crisis, the health and safety of those who work in the healthcare industry became a primary concern. It is absolutely necessary to place a high priority on the mental, emotional, and physical health of those who work in the medical field. This involves ensuring that they have access to tools for mental health, encouraging a healthy work-life balance, and developing workplaces that recognize and meet their requirements.
- **Balancing Emergency Response and Essential Care:** It is essential to find a balance between the management of impending crises and the provision of essential medical services. A comprehensive crisis response strategy that takes into account the preservation of standard healthcare services should ensure that patients with chronic diseases and those undergoing elective surgery continue to receive prompt care.
- **Harnessing Technology for Resilience:** The epidemic brought to light the potential for technology to effect radical change. Continuous investments in telemedicine, electronic health records, remote patient monitoring, and virtual training platforms help to strengthen the agility of the healthcare system and provide continuity of care, even in the face of interruptions.



In Lebanon, the challenges brought on by the COVID-19 pandemic have resulted in the acquisition of priceless knowledge that will serve to direct the future of elective treatments and healthcare readiness. Adaptable healthcare systems that prioritize patient care, protect the well-being of healthcare providers, and remain resilient in the face of unanticipated obstacles are extremely important to construct, as the experiences of resource allocation, crisis communication, collaboration, and technological innovation have shown. These lessons will be essential to the establishment of a more robust and responsive healthcare environment in Lebanon as the country works toward the goal of cultivating a healthcare ecosystem that thrives even in the midst of a crisis.

## 8. CONCLUSION

The impact of the COVID-19 epidemic on elective surgeries in Lebanon has left an indelible mark on the landscape of healthcare, illuminating a complex web of problems, adaptations, and lessons that will have an effect on the future of patient care and the resiliency of the healthcare system.

- **Complex Intersection of Challenges:** The disruption of elective procedures brought on by the pandemic shed light on the complicated intersection of the priorities of healthcare, the needs of patients, and the distribution of resources. The suspension of surgeries, while essential for maintaining public health, revealed a complex web of unexpected repercussions, some of which concerned the health of patients, the safety of healthcare providers, and the viability of the healthcare system as a whole.
- **Lessons in Adaptation and Innovation:** The epidemic produced a wave of technologies that transformed the delivery of healthcare. These breakthroughs were made possible as a result of lessons in adaptation and creativity. Telemedicine emerged as a vital resource; virtual consultations expedited pre-operative examinations; and stringent infection control completely revamped the operating room setting. These changes demonstrated the healthcare industry's capacity to quickly adapt in the face of unforeseen obstacles.
- **Importance of Psychological Resilience:** The psychological and emotional repercussions of the pandemic underlined the significance of the need to encourage psychological resilience and provide assistance for mental health. Both patients and medical staff reported feelings of anxiety, uncertainty, and emotional strain, which emphasizes the need for comprehensive support systems that deal with the emotional challenges of delayed procedures and crisis-induced stress.
- **Navigating Future Preparedness:** The lessons that were learned from the epidemic provide essential insights for mapping out future preparations. It is impossible to overstate the value of creating adaptable healthcare systems, efficient communication, creative relationships, and preparing for surge capacity. The capability of a robust healthcare ecosystem to strike a balance between the provision of necessary care and the handling of emergency situations is one of its defining characteristics.
- **A Path Forward:** The disruption of elective surgeries caused by the COVID-19 outbreak put Lebanon's healthcare system to the test of its resiliency and adaptability in the face of unanticipated emergencies. In addition to this, it shed light on a way forward that may be navigated with the help of the transformative power of teamwork, creativity, and a unified dedication to patient care. As the nature of the healthcare environment continues to shift, the insights gained from this experience will act as guiding lights, illuminating the way toward a future that is more equipped, more responsive, and more robust.

The healthcare business is positioned to emerge stronger as a result of this significant disruption, with a deeper knowledge of the significance of adaptability, readiness, and patient-centered care. As Lebanon continues to develop, it is armed with the understanding that the difficulties of today can be transformed into the stepping stones of tomorrow. This creates the framework for a healthcare landscape that is not only capable of withstanding crises but also thriving in the midst of them.

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## AUTHORS

**Hayat AKOUM**, PhD in Public Health; Master Degree in Health Management; Diploma in International Classification of Diseases; Quality Consultant in Healthcare Institutions and Primary Healthcare Centers; Associate Professor at the Lebanese University and Jinan University, Lebanon. She has authored/co-authored a good number of public health research papers.



**Prof. Dr. Elias M. CHOUEIRI** has been very active in academic and research settings for over 35 years. He is the author/co-author of over 20 books and booklets, and hundreds of refereed publications, technical reports, conference presentations and newspaper articles. He has won more than 20 awards for his scholarship, and has held faculty and managerial positions at several public and private institutions in Lebanon and the USA. He is a member of the WSO Board of Directors, and serves as WSO Liaison Officer to the United Nations. Besides, he assumes the roles of Director of the WSO National Office for Lebanon, Chairperson of the WSO Highway Transportation Committee, and Chairperson of the WSO Transportation of Dangerous Goods Committee.

**Dr. Hikmat AKOUM**, has been a lecturer at the Faculty of Public Health (Branch 5), Lebanese University, since 1998, and director of the Faculty of Public Health (Branch 5) since 2019. She received her Ph.D. in Biology and Health Sciences from Lille 1 University of Science and Technology, France, and Immunology and Molecular Biology from the Pasteur Institute, France, in 1997. She has authored/co-authored a good number of research papers in peer-reviewed scientific journals on allergy, immunology, bacteriology, gerontology, and hospital risk management.

