



Towards a More Resilient Healthcare Sector in Post-COVID-19 Pandemic in Jordan

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ABSTRACT

This study explores the desirable conditions for the Health Sector Governance in post-COVID-19 pandemic Jordan. A primary qualitative approach was used with semi-structured interviews carried out with eighteen public sector doctors and hospital managers in Jordan. The results of the study indicate that there is a need for the health care sector of Jordan to be improved through governance change. Moreover, there is a need for rapid communication between stakeholders, fast financial decision-making processes, establishment of pandemic-specific emergency rooms, more coordination between public and private health sectors, a national health care database, and a system for emergency classification in hospitals. This would help in ensuring that immediate measures are taken which are focused on the providing immediate care to patients.

Keywords: COVID-19 Pandemic, Governance, Health Care Sector, Jordan, Communication

JEL Classifications: H33, M40, M41, G34

1. INTRODUCTION

The COVID-19 pandemic took the world by storm, causing widespread panic and fear, and having significant economic consequences. The measures applied by different countries of the world to deal with this epidemic have varied. Among these countries were those whose greatest concern was preserving the lives of their residents at the expense of economic sacrifices, and among them were those who devoted themselves to keeping the wheel of economic life going regardless of the number of human lives sacrificed.

Although it seems that every aspect of our lives has been affected in one way or another, the impact has been severe on certain sectors, such as the healthcare sector (Iyengar et al., 2020). The

outbreak of this virus led to a sudden and unprecedented increase in demand for medical resources, putting an enormous strain on hospitals and healthcare facilities around the globe.

One significant effect on healthcare was the issue of resource overload. Due to the highly contagious nature of this virus coupled with its severe symptoms in some individuals, there was a huge demand for hospital beds, ventilators and other essential resources required to treat patients who were severely ill with COVID-19 (Kaye et al., 2021; Ziedan et al., 2020). This increased demand meant that many health institutions struggled to meet patient needs while simultaneously protecting their staff from infection. Due to this resource demand, patients requiring hospitalization not related to COVID-19 were at heightened risk of contracting COVID-19 due to overcrowding in hospitals (Iyengar et al., 2020). A second

significant consequence of the pandemic was the disruption of medical services. Hospitals had no choice but to divert their attention towards treating those infected with corona virus, often compromising or delaying treatments for other conditions such as cancer care or elective surgeries non-related to COVID 19 (Mann et al., 2020; Arsenault et al., 2022). Additionally, social distancing regulations compromised access to outpatient treatments. Finally, the COVID-19 pandemic imposed heightened risks both physical and psychological for frontline workers who were required to attend directly to infected patients' day after day, risking death themselves (Clemente-Suárez et al., 2021).

These consequences highlight the need for serious consideration when planning strategies to mitigate future events like this outbreak. But did this actually happen after the epidemic subsided? And did the different countries care about developing strategies and governance mechanisms to deal with such pandemics? There appears to be a lack of knowledge related to this aspect. In other words, was this experience benefited from, and accordingly, strategies, tools, and governance mechanisms were developed that would help the health care sector confront any future epidemics? Or did the events go by as if nothing had happened? It seems that these questions, to be answered, need research work that investigates the reality of the situation during the pandemic time. In addition, it requires that research should focus on developing efficient methods that allow better governance and resource management during pandemics without compromising patient safety or delaying essential treatment processes. It is particularly important to focus on healthcare sectors within different types of countries. While much has been written about healthcare responses to COVID-19 in developed countries (Tan et al., 2023), it is more important that developing countries also develop forward-looking healthcare governance structures against future global health crises. We therefore explore the case here of Jordan, as an example of a lower middle-income country to answer the research questions of the study which is:

How did the health care sector in Jordan perform during the pandemic time? What are the ways to improve and change the health sector governance in post COVID-19 pandemic in Jordan? How to guard against future pandemics? How to establish more resilient healthcare sector?

The current study's main objectives were to analyse how the health care sector performed during the pandemic time, and to investigate how governance can be further improved and changed after the COVID-19 pandemic in Jordan, and how the health care sector governance has been functioning since the COVID-19 pandemic. Both the effects of the pandemic on the health care sector, and the importance of governance change in the sector, will be considered. This explores the improvements and changes that have occurred in health sector governance since the start of the COVID-19 pandemic in Jordan. The importance of achieving these objectives lies in the possibility of preparing to confront any epidemics that may occur in the future. The study highlighted the strengths and weaknesses of the healthcare sector and its resilience and ability to adaptation. Furthermore, it is drawing a roadmap for resilience and robust healthcare system after the pandemic by enhancing it

is governance system. This will contribute in assessing healthcare policymaker in reshaping future strategies and Increase readiness for any future emergencies and pandemics, which will enhance the health and resilience of society.

In addition to the previous introduction, the remainder of the paper is organized as follows: the next section presents the relevant background and literature review, which includes the study hypotheses. The research methodology is explained in the third section. Section four reports the results of the study. The last section includes the conclusions, limitations and suggestions for further research.

2. BACKGROUND AND LITERATURE REVIEW

COVID-19 pandemic significantly impacted virtually all aspects of life in Jordan, as elsewhere in the world. Jordan as a part of the world started recording COVID-19 positive cases at the beginning of 2020 and started lockdown from March 2020. Despite initially effective measures to control the spread of COVID-19 in Jordan, there are still significant consequences that affect the country (Al-Balas et al., 2020). The Jordanian government acted promptly against COVID-19 by enforcing stringent lockdowns and travel limitations. These measures were successful initially since they slowed down the spread of the virus and prevented healthcare establishments from being overwhelmed (Agostino et al., 2021). However, it became evident that these actions would have long-term effects on both the economy and healthcare systems within the country. Specifically, Jordan's already vulnerable economy was severely impacted by COVID-19, leading to many businesses being forced to shut down or operate at reduced capacity, resulting in high levels of unemployment (El-Elimat et al., 2021; Huber et al., 2021). Additionally, many families struggled with financial instability as a result of lost wages during lockdowns (Samrah et al., 2020). Moreover, while initial efforts helped prevent overwhelming hospitals with critically ill patients infected with COVID 19, the pandemic exposed deficiencies within Jordan's health care system such as lack of equipment, supplies, and adequate medical staff (Alhalaseh et al., 2021) which was a challenge faced by many countries (NHS England, 2013).

The effect on the country's vulnerable economy and healthcare system highlighting the need for ongoing efforts to mitigate the pandemic's effects (Al Qutob et al., 2020). The statement above carries several interpretations that warrant further discussion. First off, it suggests that while Jordan was quick off the blocks in implementing effective measures to prevent the spread of COVID-19 within its borders, these steps were not adequate to shield its weak economy and fragile healthcare system from severe impacts posed by this global health crisis (Akour et al., 2020). Additionally, as a result of these negative outcomes on both fronts (economy and healthcare), there is an urgent need for continued efforts aimed at mitigating COVID-19's far-reaching effects (Sharma et al., 2021). The implications stemming from this statement are also noteworthy. It highlights how even with sound

initial strategies and relevant interventions implemented during a global health crisis such as COVID-19; some countries may still experience adverse consequences leading to underlying structural weaknesses being exposed (Sallam et al., 2021) regarding access to the healthcare (Addicott, 2008), healthcare infrastructure (Ozili, 2021), supply chain reliability (Raj et al., 2022). The case of Jordan shows that despite proactive actions taken earlier on in containing the virus' spread through closing down borders and imposing lockdowns; significant challenges still emerged due mainly to external factors beyond their control. In conclusion, future research should focus on areas where improvements can be made concerning economies' resilience against pandemics like COVID-19.

2.1. The Importance of Governance Change of Health Sector

Access to quality healthcare is a fundamental human right. However, this has remained an elusive goal for many individuals and communities around the world. In numerous countries, particularly in developing nations, the health sector is characterized by poor governance structures that have led to inadequate resource allocation, limited access to care services, and suboptimal health outcomes (Addicott, 2008). As such, there has been increasing recognition of the need for governance change in the health sector as a critical step towards achieving better healthcare provision and universal health coverage (Huss et al., 2011; Lapsley, 2020), leading to better health outcomes for all individuals (Boyce, 2001). While progress has been made in improving various aspects of healthcare delivery globally over recent years through initiatives such as increased funding and technological advancements; it remains evident that more needs to be done.

Governance change refers to deliberate efforts aimed at instituting new or improved governance structures within organizations or systems. The concept recognizes that effective decision-making processes are essential for achieving desired organizational goals while ensuring accountability among stakeholders involved (Derakhshan et al., 2019; Freeman, 1994). For example, governance change involves ensuring equitable distribution of resources across different regions or communities (Barbazza et al., 2015; Kickbusch, 2010). Governance reforms can also promote greater accountability by holding those responsible for providing medical care liable for their actions (Jamali et al., 2010). The increased transparency could lead to enhanced performance levels among healthcare providers as they will be obligated to deliver optimal results. Gostin and Mok (2009) stated that there would be a need to implement strategic planning initiatives in health sector, which can help with dealing with changes that are occurring after the COVID-19 situation in the health sector.

The main aspects of weak governance are the slow communication that occurs between board members, delay in taking financial decisions by CEO and CFO which affects the entire operation, delay in collaboration with the private sector affecting the health care sector, not having appropriate emergency classification plan and not having an efficient national database. These weaknesses are the areas that will be analysed and improved in the current study.

2.2. COVID-19 and Health Sector Governance in Jordan

Jordan, as well as the rest of the world, has been affected by the vulnerabilities and gaps in healthcare systems that resulted from the COVID-19 pandemic. The country's health sector governance faces a myriad of challenges that have been brought to light by the ongoing crisis (Alshoubaki and Harris, 2021). While Jordan's healthcare system has made significant strides over recent years, there is still much room for improvement. One of the primary concerns facing Jordan's health sector governance is resource allocation and management (Torres-Rueda et al., 2021). The country struggles with limited resources, including a shortage of medical personnel and equipment (Al Qutob et al., 2020). Additionally, inequities in access to quality healthcare persist across different regions in Jordan. However, leadership plays a crucial role in ensuring effective healthcare delivery during crises such as COVID-19. Inadequate leadership can result in confusion or lack of direction within organizations tasked with managing public health emergencies (Al Qutob et al., 2020). Effective leadership requires strategic planning skills, sound decision-making abilities, and excellent communication skills.

The return of Jordanian expatriates working abroad, particularly those from the six Gulf Cooperation Council (GCC) countries mentioned by Al-Tammemi (2020), resulted in an influx of people into the country, increasing pressure on healthcare facilities that were already struggling to cope with existing demand. In addition, the responses taken to combat COVID-19 caused enormous changes to everyday life in Jordan (Macassa and Tomaselli, 2020). While these measures were necessary for containing and managing the spread of the virus, they also highlighted pre-existing weaknesses within the healthcare system. There was a shortage of essential medical supplies such as Personal Protective Equipment (PPE) and ventilators, which further exacerbated challenges faced by frontline workers (Alkhawaldeh, 2021). Furthermore, vaccine hesitancy among Jordanians at the beginning of vaccination campaigns was rampant (Hammad et al., 2023).

This phenomenon could be attributed partly due to misinformation around vaccines or lack thereof conveyed through various mediums including social media platforms. However, with time more people got vaccinated every day indicated a shift towards acknowledging their importance when it comes down public health during COVID-19 pandemic (Bizri et al., 2021). In light of these findings, it is clear that effective leadership, resources and strategic planning are needed for ensuring resilient and responsive healthcare systems amidst pandemics like COVID-19. The government must take proactive steps towards addressing gaps within their framework while considering feedback from independent institutions that can help them improve upon what's lacking so far (Alshoubaki and Harris, 2021).

It seems that the pandemic has brought attention to the need for increased investment in the health sector of Jordan. This investment should be geared towards increasing access to medical equipment, testing kits, and other essential supplies needed to manage pandemics effectively. In addition, it demonstrated the need for better coordination between government bodies

responsible for public health policy in Jordan (Al Qutob et al., 2020). Given the dynamic nature of pandemics such as COVID-19, it is essential that different sectors work together seamlessly so as not to compromise response efforts (Al-Tammemi, 2020). Furthermore, this pandemic's implications have highlighted how critical strategic planning can be when responding to pandemics or other public health crises. In particular, taking long-term measures such as investing in research infrastructure would allow policymakers to make informed decisions based on data-driven insights rather than relying on guesswork (Ozili, 2021).

The context of Jordan is similar to many other developing countries around the world such as Arab countries. Therefore, the findings of this study can help Jordanian and other developing countries' health sector policy makers in improving this important sector especially after COVID-19.

2.3. Literature Review

COVID-19 crisis caused a significant disruption to traditional models of public service delivery, resulting in a shift towards digital solutions to meet the increasing demand for online services, remote work, and contactless interactions (Agostino et al., 2021). They also highlighted the importance of digital transformation in the public sector, requiring a fundamental rethinking of processes, organizational structures, and citizen engagement. The pandemic accelerated this need for transformation as public organizations must quickly adapt to new ways of delivering services effectively. For example, the deployment of telehealth services, the creation of online education platforms, and development of digital communication channels for citizen engagement, are digital transformations that emerged during the pandemic. Agostino et al. highlighted the importance of visionary leaders in promoting innovation within public organizations, crucial to better adaptation in circumstances like the COVID-19 pandemic.

Hospitals worldwide faced unprecedented challenges because of the ongoing pandemic, ranging from resource pressures to financial regulation (Huber et al., 2021). To address these issues and ensure effective healthcare delivery, there is a need to leveraging accounting methodologies and practices (Huber et al., 2021). Scholars provides valuable insights into how accounting practices can help hospitals strategically allocate resources while maintaining financial stability in times of crisis (Huber et al., 2021; Agostino et al., 2021; Economou et al., 2015; Thomas et al., 2013). Such as managing the rational distribution of human resources and hospital beds, auditing medical operations, and controlling overhead expenses and administrative services. (Economou et al., 2015) Moreover, critical collaboration between accounting professionals and hospital leadership is essential for successfully navigating unpredicted circumstances such as pandemics effectively (Huber et al., 2021). They argued that cost accounting and financial reporting play a vital role in facilitating informed decision-making. This was crucial in ensuring that patients received uninterrupted healthcare services since hospitals could efficiently modify and redistribute their resources based on timely financial data available at their disposal. Huber et al. (2021) emphasize the crucial role of accounting in managing and optimizing hospital capacities. According to them, by utilizing

accounting techniques such as budgeting and performance measurement, hospitals are better equipped to evaluate their current capabilities and make necessary adjustments to accommodate the sudden influx of patients with COVID-19. These vital adaptations include restructuring physical spaces, redistributing resources, and encouraging greater collaboration among different departments. All of these measures were essential in ensuring that healthcare services continued uninterrupted during this critical time.

By implementing sound accounting practices, hospitals were able to navigate the complex challenges posed by the pandemic with increased efficiency and agility (Huber et al., 2021). The ability to effectively manage resources and allocate them where they are most needed is essential for any organization but especially critical for those in the healthcare sector during a crisis of this magnitude. The performance measurement aspect of accounting allowed hospital administrators to track progress towards predetermined goals, identify areas that needed improvement, and make real-time adjustments when necessary (Huber et al., 2021). Budgeting was an equally important tool which helped hospitals ensure sufficient resource allocation for key initiatives such as staff training, equipment upgrades, and other vital needs.

The significance of accounting in the healthcare industry cannot be overstated, as underscored by the writers. They stress that it plays a pivotal role in fostering efficient communication and collaboration between healthcare providers and hospital executives (Huber et al., 2021). Uniform data in general is important these days (Alshurideh, 2024; Sukkari, 2024) and uniform accounting data is an essential tool that enables medical facilities to simplify decision-making processes, promote transparency and accountability, and establish a shared understanding of the financial consequences of various options available to them. As a result, stakeholders work together seamlessly with confidence while ensuring that resources are allocated equitably across the board (Huber et al., 2021). Therefore, it is imperative for all healthcare practitioners to maintain accurate accounting records to facilitate smooth operations within their organizations.

Previous research in the above discussion focuses on the best accounting practices in the era of pandemic, however, the governance desirable governance practices in the healthcare sector in pandemics is still not explored which needs further research. This research try to fill this gap and presents recommendations to healthcare professionals and regulators for governance practices during pandemics or health crises.

2.4. Theoretical Background (Lewins Change Theory)

There are two forces that drive institutional change internal and external forces; the external forces may arise from changes in the industry, level of technologies, market, customer expectations, competitors, social values, economies and government regulations (Wilson, 1994). In contrast, the internal forces linked to the management structures, philosophies, culture, and power distance (Wilson, 1994). Current research indicate that the healthcare institution change come from both forces where the change in the external forces create a jolt in the industry as COVID-19 did to the health sector which force the healthcare institution to internal

change in governance system in health sector. Seo and Creed (2002) describe “jolts” as a concept that pushes institutions to change due to social, political, or cultural changes in society. The acceptance of the institutional change inside the institution helps in surviving and sustaining the operation in it (Laughlin, 1991; Burns and Nielsen, 2006; Delbridge and Edwards, 2007; Hardy and Maguire, 2017; Munir, 2015).

Current research sought to adopt the stage of Lewin’s (1951) change theory in Jordanian hospital during the pandemic in creating an effective atmosphere between the accountant and the hospital management where they both collaborate to enhance their practise and hospital outcome.

Lewin’s (1951) change theory emphasizes in the three-stage model that in many cases of change the change is not permanent and the situation returns to its previous state if the change is not intended to be permanent and comprehensive. The structured of his model consist of three stages; the unfreeze stage which require to prepare, educate, and create awareness to the different stakeholders about the desired change. The next stage is implementing the desired change which require transforming to a new level of technologies, values, behaviours etc., finally, the refreeze stage where people move to the acceptance of final change the stabilization of the change.

3. RESEARCH METHODOLOGY

This section reveals how healthcare responses to COVID-19 by implementing a qualitative research methodology. In addition, it clarifies how data is collected and how the sample is chosen.

A qualitative research methodology has been utilised here to gain a thorough understanding of the complex phenomena. This approach enables the evaluation of subjective encounters, the importance of specific occurrences or circumstances, and their surrounding social context (Williams, 2007). When investigating subjects that necessitate detailed analysis, such approaches prove extremely beneficial. One major advantage of this type of research is its ability to explore rich and detailed data that cannot be obtained through statistical analysis alone (Fellows and Liu, 2021). Merely relying on numerical data may not be sufficient since it cannot capture the complexities and subtleties associated with such subjects. Therefore, employing qualitative research methods, like observation, interview, and case study, facilitates a more extensive exploration by allowing researchers to gather extensive data uncovering crucial insights into human conduct and social dynamics (McNeill and Chapman, 2005). The goal of qualitative research is to comprehend the intricacies of human experiences by gathering in-depth insights into participants’ thoughts, emotions, and motivations.

One frequently utilized qualitative research technique is the in-depth semi-structured interview method, wherein an investigator engages with individuals on a personal level to elicit candid and comprehensive discussions (Cohen et al., 2017). This type of research is known as qualitative research and involves conducting semi-structured interviews (Esser and Vliegthart,

2017). The technique involves using open-ended questions to obtain narrative, viewpoints, and opinions from participants (Patten, 2017). In-depth interviews provide researchers with valuable insight into the emotions, experiences, and beliefs of their subjects. As a result, they are an exceptionally helpful source of data, enabling researchers to delve deeper into the complexities of their lived experiences (Wan, 2022). Semi-structured interviews provide researchers with an opportunity for meaningful conversations with participants (Wan, 2022; Fellows and Liu, 2021). By asking open-ended questions and prompts, participants can share personal stories that add context to their perspectives in a nuanced manner (Esser and Vliegthart, 2017). This technique promotes a more profound understanding of the subjective meanings’ individuals attach to their experiences.

Furthermore, qualitative research using semi-structured interviews provides flexibility in the research process (Patten, 2017). Since these interviews are semi-structured in nature, researchers can balance a predefined framework with participants’ freedom to elaborate on relevant aspects during the interview process efficiently (Harris et al., 2019). Researchers have the ability to explore emerging themes, follow-up on interesting points, and adapt their questioning based on participant responses. This flexibility increases researchers’ chances of capturing unexpected insights while remaining responsive to each participant’s unique perspectives (Hammarberg et al., 2016).

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Engaging in qualitative research using semi-structured interviewing methodology has significant advantages over quantitative approach when seeking detailed insight into complex human experiences due largely its ability to produce detailed narratives resulting from personalized conversations, flexibility in adapting questions to emerging themes or points of interest from respondents while allowing for the incorporation of diverse perspectives and viewpoints (McNeill and Chapman, 2005).

The current study has utilised the semi-structured interviews with public sector doctors and hospital managers in Jordan. These individuals were chosen based on convenience sampling which means those individuals were picked that were easily accessible. The study has made use of primary qualitative approach in which the first-hand information is obtained. A total of 18 participants were recruited who were then asked questions related to the topic of the study. All of them are coded as Doc1-Doc18 and agreed to do the interviews and recode their responses for the purpose of analysis later on. The questions were asked face to face in order

to ensure that participants were able to answer in an efficient way and as honestly as possible. The whole purpose of the face-to-face interview was to ensure that participants did not feel that they are being pressurised to answer each question, rather they were given the freedom to answer what they were comfortable with.

The data analysis technique that was used for the study were thematic analysis. Themes were developed which helped in understanding the topic in a better way. For the purpose of extracting themes, the researcher analysed each response and coded them. The codes were developed from responses and specific keywords were extracted. The suggestions and recommendations for health sector governance improvement after COVID-19 were the main keywords that highlighted in the analysis. Based on extracted keywords, the themes were developed which helped in ensuring that themes were in line with the aim of the study.

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4. FINDINGS

The following main themes are extracted from the data analysis of this study which present a recommendation area to enhance the public health sector governance.

4.1. Focus on Fast Communication with Board Members

Fast communication between hospitals board members and between board members and different stakeholders are heavily highlighted in the data of this research. Improving the communication strategy to be more interactive, attainable to stakeholders, and has a strong feedback system with clear procedures is one of the critical points for success in health sector after COVID-19. One of the participants stated:

There is a need to ensure that communication among board members, managers, and people related to hospital are carried out effectively. When there is effective and focused continuation of information, it helps in making certain that effective information is passed into everyone else. Doc2.

Another participant supported that by:

Fast communication means that every member is interacting with each other and ensuring that immediate response is provided. There is a need to understand that communication strategy is implemented which is focused on the idea that everyone should communicate with each other openly and in a transparent manner

to prevent any kind of miscommunication as miscommunication is repetitive in crises. Doc4.

Another response was:

Feedback is the key factor that helps in understanding the communication that exists between the people. It is imperative that proper feedback is provided which is focused on the idea that everyone understands what the expectations are and how to deal with them in ensuring that relevant measures are taken. Doc11.

4.2. Focus on Fast financial Decisions by CEO and CFO

In the era of health crisis, the need for more authority to CEO and CFO to take rapid financial decisions related to their hospitals resources is very important for the sustainability of health service to patients as any delay may lead to catastrophic reduction in the resources. One of the participants stated:

CEO and CFO must ensure that they are taking decisions regarding financials in an effective way. This means that they must make certain that strategies are implemented to ensure that they are no delays occurring regarding financials aspect. Doc7.

Another participant stated:

Fast financial decisions mean that CEO and CFO should have the ability to take immediate decision regarding any financial issue. This kind of situation usually occurs when one has to think on their feet and make certain that any major mishap is prevented. For example, we faced some shortage in oxygen resources inside the hospital due to huge demand for oxygen and the delay of payment to the vendors. We must be faster. Doc8.

4.3. Focus on Fast Result Systems for Pandemic which Need Collaboration with Private Sector

The collaboration between public and private health sector is one of the key points mentioned in the data. The collaboration fields would be in experience exchange, the fast availability of beds for patients, and expedite the COVID test results in available labs. This change in public health sector governance enhance the people trust in this sector. One of the participants stated:

The ability to think quickly and taking decisions accordingly was something that was not possible when the COVID started. But now, it has become important that with different mindset coming together to work, immediate decisions are taken. We must put our hands with private health sector Doc10.

Another participant stated:

It is vital that collaboration with the private sector is focused on the aspect that with COVID-19 that had affected the Jordan health sector significantly, measures are taken in which health authorities understand that by taking immediate decisions they would be able to generate immediate results in the form of taking steps that are more aligned with the policies of the health sector. Doc5.

Another participant argued regarding the coordination and collaboration between public and private health care sector:

The need of direct coordination between public and private hospital board members to distribute patients between both types of hospitals based on capacity and other factors. Doc17.

4.4. Focus on Emergency Classification

Before COVID-19, Jordanian public health sector has very weak emergency classification for patients who arrive the emergency department. The need to change it is crucial to save lives of people who need immediate intervention. The participants argued that this recommendation is significantly improved during and after COVID-19 as many hospitals has now emergency classification section for patients who arrive the emergency department which determine the severity and the level of arrived of the cases. A participant stated:

The old system before COVID must be changed, now the need to have emergency classification plan for patients who arrived at hospitals is important. The authorities should ensure that they are taking measures in which patients that arrive at the hospital in emergency situations should be handled accordingly. Doc7.

Another participant supported that by:

It is important that immediate actions are taken for which there is a need to take decisions which are based on quick thinking by assessing the situation that one is facing currently. Doc15.

4.5. Focus on National Database

The demand for national health sector database in Jordan arises after COVID-19 as in many cases for people who have COVID-19 may also have many other health problems which may affect the medical treatment but the doctors do not know that as no national health database. A participant stated:

The need of national database for health care such as NHS in UK as we do not have this in Jordan, this helps the hospitals for fast interventions with patients based on the health history of them. Doc18.

Another participant was of the view:

It is important that a national database of health care is developed in Jordan, similar to the one developed by NHS in the UK. This allows the health care authorities to ensure that they are able to immediately have access to relevant information and set out the strategies that is required to help with the interventions with patients. Doc11.

4.6. Focus on Bureaucratic Procedures

All participants criticised the bureaucratic procedures and the delay in decisions during COVID-19 due to administrative work. Participants argued that during pandemics the fast-decision-making process mainly in dealing with most affected patients and hospital resources is important. A participant stated:

Minimize the bureaucratic procedures in health public sector and try to be more flexible. With the minimization of the bureaucratic

procedures, the health public sector would be more willing to get the required help from the relevant authorities and ensure that appropriate strategies are implemented. Doc8.

Another participant was of the view:

It is important that the health care sector is made flexible as this would allow the system to be built on the notion of helping patients in emergency situations, without having to make them wait. We must have plan B procedures that be executed directly in crises which focuses on fast not bureaucratic procedures. Doc16.

4.7. Focus on Emergency Room

The need of emergency room that be activated immediately in health crises are one of the main point of views in the data analysis of this research. This room is responsible to manage and monitor the country's situation in term of the crisis and coordinate the work between public and private health sectors. A participant stated:

Create an emergency room from at least one board member or manager from each hospital in Jordan (both public and private) and the head on this room should be the minister of health and prime minister. This room will be activated automatically upon any health emergency in the country or the world. Doc14.

Another participant supported this view by:

With the development of this emergency room, it would become feasible for hospitals to directly interact with the minister of health and prime minister which would lead to taking immediate measures that are required in times of crisis. Moreover, this would also prevent any issue of wait or having to decide on response when the parties are available immediately. Doc6.

5. DISCUSSION

The analysis of the themes that were developed in the previous section of the study indicate the responses that were obtained through interviews revealed how the health care sector in Jordan should be improved in regard of its governance. In Jordan, the COVID-19 pandemic has had a significant impact on the country's healthcare sector. The unprecedented crisis brought about by the COVID-19 pandemic has presented a multitude of challenges for the government and various healthcare institutions in Jordan (Kaye et al., 2021). Change theory provides a suitable framework to better comprehend the governance changes which have occurred during this period. In the unfreeze stage the pandemic uncover people perception toward the current status of the healthcare sector and enlarge the urgency of the desired change.

To adequately address the issues raised by the pandemic, Jordan's healthcare sector has had to quickly adapt their governance structures (Mann et al., 2020). This change in the governance's structure represent the second stage of the theory which is the change. Rapid decision-making processes were essential in managing the crisis. Healthcare institutions realized that efficient communication channels with board members, managers, and stakeholders needed to be established to ensure timely decision-making and coordination of responses (Clemente-Suárez et al., 2021).

Effective decision-making was made possible through regular and timely communication between board members, who met more frequently, often via virtual platforms for safety purposes (Ziedan et al., 2020). These meetings provided an avenue for sharing crucial information, discussing emerging challenges, and formulating strategies to combat the spread of COVID-19. The open lines of communication fostered allowed healthcare institutions in Jordan to stay informed about developments related to the pandemic and tailor their approaches accordingly.

Active participation from board members during decision-making processes enabled better coordination efforts between healthcare institutions and other stakeholders involved in implementing strategies (Addicott, 2008). With a clearer understanding of priorities and challenges faced by healthcare providers, expert knowledge was utilized towards formulating effective strategies that optimized resource allocation while ensuring provision of quality care services across different sections of society (Huss et al., 2011).

In addition to effective decision-making processes, adaptable governance structures have facilitated successful implementation of these strategies (Huber et al., 2021). This required seamless collaboration between different departments as well as various stakeholders within healthcare institutions. By streamlining communication channels and encouraging cross-functional teamwork while eliminating bureaucratic hurdles encountered during daily operations within such frameworks, optimal responses were achieved.

Furthermore, the governance changes also enabled healthcare institutions to be more responsive to emerging challenges and rapidly adjust their strategies as new information became available (Barbazza et al., 2015). The dynamic nature of the pandemic required constant evaluation and adaptation of response measures. Regular communication with board members ensured that decisions were based on the latest scientific evidence, expert advice, and best practices. This iterative approach allowed healthcare institutions to continuously improve their response efforts and mitigate the impact of the virus on public health (Kickbusch, 2010).

Furthermore, the pandemic also demanded fast financial decisions to address the immediate needs of the healthcare sector. The Chief Executive Officer (CEO) and Chief Financial Officer (CFO) played pivotal roles in making quick financial decisions to allocate resources where they were most needed (Jamali et al., 2010). The prompt execution of financial decisions proved instrumental in obtaining indispensable medical equipment, enhancing testing capabilities, and ensuring the availability of crucial supplies. When faced with the COVID-19 pandemic, swift response systems were integral to Jordan's healthcare sector to effectively combat the virus (Gostin and Mok, 2009). These systems were developed to streamline processes, enhance coordination, and monitor pandemic response initiatives' progress. Realizing the need for innovation and efficiency, engaging with the private sector became essential in implementing these systems.

To leverage both sectors' skills, resources, and innovative capabilities in public-private partnerships was critical (Al-Balas

et al., 2020). The partnerships facilitated quick result system development and deployment which was vital in managing the pandemic. By pooling their knowledge and resources into a common goal of overcoming virus-related challenges promptly by working collaboratively together.

An essential aspect of fast result systems was its real-time data analysis implementation. Timely reporting played a pivotal role in comprehending virus spread dynamics enabling informed decision-making (El-Elimat et al., 2021). Public-private collaborations allowed for seamless integration of data originating from various sources like hospitals, testing centres alongside public health agencies (Samrah et al., 2020). The use of advanced analytics plus data visualization tools enabled policymakers to gain valuable insights into pandemic progression by monitoring hotspots allowing them to allocate resources efficiently thus provide targeted interventions.

The significant contribution that contacts tracing applications had on fast result systems cannot be overlooked. Collaborations between public entities alongside private players facilitated user-friendly contact tracing apps development plus their deployment (Al Qutob et al., 2020). These apps enabled individuals to report symptoms while tracking exposure to COVID-19 becoming critical toward providing timely notifications and guidance subsequently contributing towards risk mitigation measures early on (Akour et al., 2020).

Additionally, partnering with private logistics firms provided an efficient vaccine distribution network across Jordan. Collaboration with cold chain providers, technology platforms, and private logistics companies facilitated streamlined transport plus storage of vaccines (Sallam et al., 2021). These partnerships played a significant role in achieving high vaccination rates and controlling the virus's spread. Furthermore, collaborations with the private sector brought valuable innovation to fast result systems (Alshoubaki and Harris, 2021). The private sector's entrepreneurial spirit and agility allowed for the rapid development and deployment of new technologies and solutions. Start-ups and technology companies played a vital role in creating innovative tools, such as remote monitoring devices, telemedicine platforms, and AI-powered diagnostic systems (Al Qutob et al., 2020). Moreover, the need for national health sector database and the activation of emergency room which consists experts in health sector during crises is crucial for this important sector. These practices are applied in developed countries such as UK and its NHS system which can be studied in Jordan and other developing countries. These advancements not only enhanced the efficiency of the healthcare sector's response but also paved the way for future advancements in healthcare delivery. There is a global acceptance of change in the health system, not at the individual level but at the government level, which in turn represents the third stage of Lewin's theory, which will contribute to stability in the new health system.

6. CONCLUSION

From the above analysis, it has been observed that the health care sector of Jordan has been severely affected by the COVID-19 pandemic which led to the government and health care institutions

in the country taking immediate measures to prevent the challenges that are linked to the pandemic to affect the health care sector. One of the measures required changing the framework of the health care sector through the use of change theory. The Jordanian health care sector to adopt some governance structural changes which required the board members to ensure that fast communication takes place, along with coordinating with each other that would help with providing immediate relief to patients. Moreover, there is also the need for taking financial decisions which would help in addressing the financial issues of healthcare sector with the CEO and CFO making quick decisions regarding any financial situation. The health care sector governance also needs to focus on the improvement of direct coordination, improving the national database, bureaucratic procedures and emergency room development.

All of the above factors would help significantly in making certain that relevant measures are taken to ensure that patients are provided with quality service without having to compromise their own need in any way. It is vital that the government of Jordan focuses on the health care sector which has been significantly affected by the pandemic and has affected not only patients, but health care staff as well which requires immediate attention too.

The recommendations of the study are provided below:

- The health care sector needs to be more flexible to ensure that relevant coordination with every stakeholder is effectively carried out in preventing any adverse incident
- There is a need for communication strategy which is focused on developing a transparent communication measure which are implemented during the time when there is an immediate health emergency taking place.

From the perspective of the future work, future studies can focus on a specific element of the study to carry out further research. These specific elements of the study could be focusing solely on the communication or financial aspects of the health sector governance.

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