

The management of the COVID-19 health crisis in Algeria: Measures and methods

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Abstract---The COVID-19 health crisis posed major challenges for Algeria, particularly in the healthcare and economic sectors. The government adopted several measures, including lockdowns, border closures, and intensified awareness campaigns to curb the spread of the virus. Field hospitals were set up, and medical equipment was supplied to respond to the surge in infections. However, the crisis revealed significant weaknesses in the healthcare infrastructure, as well as shortages in human resources and essential equipment. Despite these challenges, the crisis highlighted the urgent need to improve the healthcare system and to strengthen preparedness for future emergencies.

Keywords---Crisis management, health crisis, COVID-19, measures, procedures.

1. Introduction

The management of health crises in any country reflects the strength and effectiveness of its healthcare system. It also reveals the level of its development in this field. With the emergence of the COVID-19 pandemic in Wuhan, China, on December 29, 2019, and its rapid spread to many countries, the World Health Organization classified it as a global pandemic. This classification required urgent preventive measures to control the outbreak. Every country, in response, implemented its own strategies and actions to confront this crisis.

China was the first to contain the virus effectively. Algeria, like many other nations, faced the impact of this pandemic. The virus spread widely across the country. The first confirmed case appeared in the city of Boufarik and involved an Italian national on February 25, 2020. The authorities managed to contain

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the case and repatriated the individual. However, another case was soon confirmed, leading to further transmission. This forced the authorities to declare the city of Blida a high-risk zone. As infections continued to rise, the Algerian government introduced a series of health instructions and preventive measures to contain the spread of the virus.

This study is significant because Algeria suffered greatly from the effects of the COVID-19 crisis. The pandemic had negative consequences across various sectors, including the economy, society, and culture. These challenges led us to examine the different procedures, methods, and strategies adopted to confront the crisis in Algeria.

Based on this context, the main research question is: **What were the measures and methods adopted by the Algerian government to manage the COVID-19 health crisis?**

This central question gives rise to the following sub-questions:

- What is COVID-19, and how does it spread?
- How did Algerian authorities manage the COVID-19 health crisis?
- What were the main procedures and strategies adopted by the government to confront the pandemic?

1.1 Research Hypotheses

The procedures and strategies adopted in Algeria were effective in managing the COVID-19 health crisis.

1.2 Research Objective

This study aims to analyze the effectiveness of the health measures adopted by the Algerian government to combat COVID-19. It also seeks to assess the impact of the crisis on the national healthcare system by examining measures such as quarantine, border closures, and social distancing. Additionally, the study evaluates the public's response to these actions and the level of adherence to health guidelines.

1.3 Research Methodology

The study adopts a descriptive and analytical approach, which is suitable for the topic and objectives. It begins with a historical overview of the Algerian healthcare system and introduces the concept of the coronavirus. It then highlights the preventive measures, strategies, and health instructions implemented to manage the crisis in Algeria.

2. Theoretical and Conceptual Framework

2.1 A Historical Overview of the Algerian Health System

Health is a vital resource for achieving social, economic, and cultural development. It is also a fundamental and universal human right. From the moment of independence, Algeria has aimed to meet the health needs of its population in a comprehensive, unified, and consistent manner. This was done within the framework of the National Health Charter, which serves as the guiding framework for the country's health system. The state mobilized all available resources to protect and promote public health. Over time, the health system went through several key stages:

- a. **The First Phase (1962–1973):** This period was marked by the weakness of the healthcare system. The country was facing severe economic and social challenges, and the health infrastructure inherited from the colonial era was inadequate. There was a shortage of physicians, prompting the state to rely on foreign medical staff. This system was known as “State Medicine” and was mostly available in major cities such as Algiers, Constantine, and Oran.
- b. **The Second Phase (1974–1986):** During this period, the government declared healthcare free of charge in 1974, covering all sectors and health institutions. The state assumed full responsibility for funding the system.

- Power was centralized, and the role of managers was limited to budget implementation. The government and social security funds covered all health-related expenses.
- Numerous healthcare facilities were constructed, particularly hospitals and health centers, to address service gaps. The number of facilities increased from 558 in 1974 to 1,147 in 1986. There was also a notable rise in hospital beds, medical staff, and paramedical personnel.
- c. **The Third Phase (1987–2004):** This phase witnessed several major developments, including:
 - The creation of the National Laboratory for the Control of Pharmaceutical Products (LNCPP).
 - The establishment of the Central Pharmacy for Hospitals (PCH) in 1994.
 - The founding of the National Blood Agency (ANS) in 1995 and the National Agency for Health Documentation (ANDS).
 - The issuance of Executive Decree No. 97-456, dated December 2, 2007, which defined the rules for the creation and operation of hospital institutions.
- d. **The Fourth Phase (2004–Present):** This ongoing phase is marked by significant structural reforms, including:
 - Executive Decree No. 07-140, dated May 19, 2007, which established Public Hospital Institutions (EPH) and Public Institutions for Proximity Health (EPSP).
 - The implementation of the hospital treatment contract system in 2009.
 - The joint ministerial order dated January 15, 2012, which set standards for classifying, organizing, and managing EPH and EPSP institutions.
 - The enactment of Health Law No. 18-11 on July 29, 2018 (Arabi, 2021, pp. 150–153).

2.2 Health Crisis Management

Serious diseases reveal the strength and resilience of health systems around the world. The spread of disease can lead to major human suffering, death, and economic loss, especially when health systems are not prepared to respond. Past epidemics have exposed both the strengths and weaknesses of healthcare systems in different countries. The way a health crisis or epidemic is managed plays a crucial role in either limiting its spread or making it worse.

Since the beginning of the 21st century, several major diseases have emerged and affected countries globally. These include Severe Acute Respiratory Syndrome (SARS), Avian Influenza (H5N1), Swine Flu (H1N1), the Ebola virus, the Zika virus, and most recently, COVID-19. According to the World Health Organization, these diseases have spread to most parts of the world. Each country has adopted its own approach to managing these health crises. (Nada Maouda, 2020, pp. 86–87)

2.3 COVID-19 and Its Spread in Algeria

2.3.1 Definition of Viruses

Viruses are microscopic organisms that cause disease in humans. They spread rapidly once they enter the body. Inside the body, they multiply and cause damage to organs. In some cases, the result can be fatal. It is difficult to eliminate viruses because they can adapt and mutate frequently, while still retaining their ability to evolve. (Louiza, 2020, p. 289)

2.3.2 Definition of the Coronavirus (COVID-19)

Coronaviruses are a large family of viruses. They are known to cause mild illnesses like the common cold, as well as more serious diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS), also known as acute pneumonia. COVID-19 is a new strain from this family that had not previously been identified in humans.

The novel coronavirus was first detected in Wuhan, China, in 2019, after cases of viral pneumonia were reported. On January 12, 2020, the World Health Organization gave the virus the temporary name “2019-nCoV.” Later, the International Committee on Taxonomy of Viruses officially named it “SARS-CoV-2.” The World Health Organization confirmed that it belongs to the same genus as the virus that caused the SARS outbreak. (Souheila & Abdelmalek, 2023, pp. 405–406)

Due to its rapid spread, the World Health Organization classified COVID-19 as a global pandemic. It is a highly contagious respiratory illness that can affect all people. However, older adults and individuals with chronic conditions are more vulnerable to severe illness, and the infection can be fatal.

3. The Spread of the Coronavirus in Algeria

The COVID-19 pandemic began spreading in Algeria on February 25, 2020. The first confirmed case was an Italian national who tested positive for SARS-CoV-2.

- On **March 4, 2020**, 17 cases were confirmed in Blida Province.
- On **March 12, 2020**, President Abdelmadjid Tebboune ordered the closure of schools, institutes, universities, and kindergartens.
- On **March 13, 2020**, the number of confirmed cases began to increase.
- On **March 16, 2020**, the Ministry of Health, Population and Hospital Reform reported 60 confirmed cases. These included two in Algiers, and one each in the provinces of Bordj Bou Arreridj, Bouira, Tizi Ouzou, and Annaba. All flights to Europe were suspended starting from that date.
- On **March 17, 2020**, the Minister of Religious Affairs ordered the closure of mosques and suspended both Friday and group prayers until April 4.
- On **March 19, 2020**, the Ministry of Health confirmed 10 new cases and two deaths. This brought the total to 82 confirmed cases, including 8 fatalities.
- On **March 20, 2020**, the number of confirmed cases rose to 94.
- Also on **March 20, 2020**, President Tebboune ordered a reduction in the number of public employees, suspended public transport, closed cafés, and banned public gatherings.
- On **March 22, 2020**, the 50% workforce reduction policy for public sector employees came into effect.
- On **March 26, 2020**, total confirmed cases reached 367, including 35 new infections. (Abbas & Jennat, 2021, p. 138)

The number of cases continued to rise steadily. By **December 31, 2020**, Algeria had recorded a total of **99,610 cases** and **2,756 deaths**, with **299 new infections** reported on that day. By **December 31, 2021**, total confirmed cases had increased to **218,432**, with **6,276 deaths** and **395 new infections** recorded. As of **May 27, 2022**, the total number of confirmed cases reached **265,870**, and the total number of deaths was **6,875**, according to data from the National Institute of Public Health.

4. Symptoms of Coronavirus (COVID-19) and Modes of Transmission

4.1 Symptoms of Coronavirus (COVID-19)

The symptoms of COVID-19 vary from one person to another. The virus may incubate for a period ranging from two to fourteen days. In some cases, symptoms may be mild or even go unnoticed. The most commonly identified symptoms include:

- **Fever or elevated body temperature:** Fever is a primary indicator of infection and is often accompanied by feelings of intense heat or chills.
- **Persistent dry cough:** This symptom is typical and generally appears without phlegm or mucus in the early stages.

- **Fatigue and general exhaustion:** Infected individuals often report a significant sense of tiredness, which may interfere with daily activities.
- **Shortness of breath or difficulty breathing:** These symptoms are more common in severe cases, where the virus affects the lungs and makes breathing more difficult.
- **Loss of smell and taste:** This has emerged as a distinctive symptom of COVID-19 and can occur even in the absence of other signs.
- **Muscle and joint pain:** Many patients experience strong aches in muscles and joints, resembling flu-like symptoms.
- **Nasal congestion or runny nose:** These symptoms may also appear and often resemble those of the common cold.
- **Persistent headache:** According to a World Health Organization (WHO) report, approximately 14% of about 6,000 COVID-19 cases in China experienced headaches and sore throats, while around 5% reported nasal congestion.
- **Nausea, vomiting, or diarrhea:** These gastrointestinal symptoms may appear in some cases.
- **Conjunctivitis (pink eye):** Scientific studies indicate that about 3.1% of COVID-19 patients also suffer from conjunctivitis, commonly known as pink eye. (*Taba Al-Mahdi, 2021, pp. 30, 37*)

4.2 Modes of Transmission of Coronavirus (COVID-19) Most scientific studies indicate that infectious viruses such as the coronavirus spread in two main ways: direct and indirect transmission.

A. Direct Transmission: In this case, the virus is passed directly from one person to another through several possible means:

- **Physical contact:** Infection may occur through direct skin-to-skin contact.
- **Respiratory droplets:** The virus can spread via bodily fluids expelled during coughing or sneezing, as droplets carry the virus from an infected person.
- **Vertical transmission:** The virus may pass from mother to fetus through the placenta.
- **Blood transfusion:** Transmission can occur if infected blood is transferred from one person to another.

B. Indirect Transmission: In this mode, infection occurs through germs or viruses that persist on non-living surfaces. People may contract the virus by touching these objects or surfaces and then touching their eyes, noses, or mouths. Moreover, the virus can spread through the air via tiny particles released during speech or breathing.

- Infection can occur when individuals inhale virus-bearing particles that remain airborne for extended periods.
- Living carriers in nature—such as rodents, insects, or animals—also play a role, as seen in bird flu and swine flu.
- Airborne transmission allows the virus to remain suspended in poorly ventilated indoor spaces. This type of spread is more likely in crowded areas. (*Naeem & Hanan, 2021, p. 62*)

5. Measures and Procedures Adopted by the State to Manage the COVID-19 Crisis

Since independence, the Algerian state has shown concern for public health. It has enacted various laws, including constitutional provisions. The 2016 Constitution, in Article 66, affirms that: *“Healthcare is a right for citizens. The state is responsible for preventing and combating epidemic and contagious diseases and ensuring access to treatment for the underprivileged.”* (Constitution, 2016, p. 9)

Likewise, the 2020 Constitution reiterates this principle. Article 63 states: *“The Algerian state shall ensure healthcare, particularly for those in need, and shall work to prevent and combat infectious and epidemic diseases.”* (Constitution, 2020, p. 17)

In addition, Algeria enacted Health Law No. 18-11 on July 2, 2018, aiming to develop healthcare services and respond to fast-paced global changes in the field. When COVID-19 emerged and was

declared a pandemic by the World Health Organization, Algeria took early and proactive preventive measures, including:

- Designating 51 quarantine centers across 15 provinces to accommodate Algerians returning from abroad.
- Issuing Executive Decree No. 20-69 on March 21, 2020, concerning preventive and control measures against the spread of COVID-19. The decree included the following:
 - Temporary restrictions on physical contact in public spaces and workplaces.
 - Application of measures nationwide for a 14-day period.
 - Suspension of all forms of passenger transport, including air, road, and rail services, as well as metro, tramway, cable car, and shared taxi services. (*Executive Decree No. 20-69, pp. 6–7*)

Subsequently, Executive Decree No. 20-70 was issued on March 24, 2020 (29 Rajab 1441), outlining additional preventive measures. These include:

- Implementation of quarantine systems.
- Restriction of movement.
- Regulation of commercial activity and supply chains.
- Enforcement of social distancing, as stated in Article 1 of the decree.
- Imposition of home quarantine in municipalities or provinces declared as outbreak zones.
- Quarantine could be full or partial, depending on local epidemiological conditions.
- Full quarantine involves prohibiting people from leaving their homes during the designated period.
- Movement of individuals is restricted during the quarantine period.
- Exceptions may be granted for essential needs such as purchasing food, urgent medical treatment, or permitted work activities, provided proper authorization is obtained.
- A provincial committee was established to coordinate sectoral efforts for the prevention and control of the spread of COVID-19.
- A complete lockdown was enforced in Blida Province for ten (10) days.

Maintaining a minimum distance of one meter between individuals was considered a mandatory preventive measure. (*Decree No. 20-70, pp. 10–11*)

In addition to this, several complementary executive decrees were issued. These decrees outlined the extension of the quarantine period. The Algerian state also suspended educational activities and closed universities, schools, Qur'anic institutions, Qur'anic education schools, and nurseries starting from March 12, 2020. It also suspended Friday prayers and group prayers in mosques, allowing only the call to prayer.

- **Exceptional leave:** Article 06 of Executive Decree 20/60 granted a paid leave of 14 days to more than 50% of public sector employees.
- **Medical support and supplies:** Health facilities were provided with the necessary tools and resources. This included equipment, PCR tests, antigen tests, protective materials, and oxygen. Hospitals were also equipped with additional beds when needed.
- **Testing authority:** The Pasteur Institute was given exclusive authority to conduct PCR tests for COVID-19. However, it was unable to meet national testing needs. This created a complex situation, largely caused by the centralized structure of the healthcare system, which has existed since 1973.
- **Public awareness website:** An online awareness platform was launched in coordination between the Ministry of Health and the Ministry of Post and Telecommunications. The platform aimed to raise awareness about the risks of COVID-19 and explain how to prevent infection. The website, available in Arabic and French, can be accessed at <http://covid19.sante.gov.dz>. It includes several sections that provide users with detailed information about the virus. (*Bouacha, 2022, p. 19*)

5.1 Economic Measures

- According to Presidential Decree No. 20-67, a new budget line was created, and funds were allocated to the operating budget of the Ministry of Health, Population, and Hospital Reform for

the year 2020. The budget item was titled "*Expenditures related to pandemic response – Coronavirus*," listed under code 37-02, with a financial allocation of **3.7 billion Algerian dinars** (3,700,000,000 DZD).

- Presidential Decree No. 20-71 also introduced a new item in the operating budget of the same ministry. The item, listed under code 44-05, was titled "*Contribution to the National Pharmaceutical Agency*," with a financial allocation of **380 million dinars** (380,000,000 DZD).
- In addition, Presidential Decree No. 20-126 established two new budget lines and reallocated funds within the operating budget of the Ministry of Health and Hospital Reform. The first, under code 44-05, was titled "*Contribution to the Central Pharmacy of Hospitals*," and was intended for the purchase of medicines and protective supplies in response to the pandemic. The second, under code 44-06, was titled "*Contribution to the Pasteur Institute – Algeria*," and was designated for the acquisition of testing kits and diagnostic consumables for COVID-19. The total allocation amounted to **8.943 billion dinars** (8,943,000,000 DZD).
- Furthermore, Executive Decree No. 20-143, dated June 4, 2020, authorized the transfer of funds to the Ministry's 2020 operating budget. A total of **3.6 billion dinars** (3,600,000,000 DZD) was allocated, with **3.5 billion dinars** earmarked for the Central Pharmacy of Hospitals (code 44-05) for the purchase of medicines and protective materials. An additional **100 million dinars** (100,000,000 DZD) was allocated to the Pasteur Institute (code 44-06) for the purchase of thermal scanners and diagnostic supplies related to COVID-19. (*Lili, 2020*)
- A budget of **100 million US dollars** was also set aside to meet urgent healthcare needs. This was used to provide hospitals and medical staff with essential equipment such as beds, masks, ventilators, pharmaceutical supplies, medications, and protective gear. Additionally, **3.5 billion dinars** were allocated specifically for COVID-19 test kits. The government also worked to increase the domestic production of medical supplies to ensure adequate coverage of patient needs and carried out immediate procurement of necessary items.
- Finally, efforts were made to reduce the import bill, which was brought down from **41 billion to 31 billion US dollars**.
 - The suspension of contract agreements for studies and services with foreign firms is expected to save Algeria approximately **seven billion US dollars annually**.
 - Operating budget expenditures were reduced by **30%**, without affecting salary-related obligations. (*Samah, 2020*)
 - A special allowance was established for certain categories of local and regional public sector workers who were mobilized to support COVID-19 prevention efforts. The allowance was set at a fixed amount of **5,000 Algerian dinars**, according to Executive Decree No. 20-140, dated **April 26, 2020** (corresponding to **3 Ramadan 1441 AH**).
 - Financial aid was also granted, as stipulated in Executive Decree No. 20-211, issued on **July 30, 2020** (corresponding to **9 Dhu al-Hijah 1441 AH**). This assistance targeted individuals whose occupations were negatively affected by the COVID-19 crisis. The aid was fixed at **30,000 dinars per month** and paid for a period of **three months** to compensate for losses incurred during the lockdown.
 - The Ministry of Finance was tasked with simplifying customs procedures for imported food products. This included fast-tracking the release of goods, in line with the emergency conditions facing the country.
 - The Algerian government introduced legal penalties, including imprisonment, for individuals who violated home confinement measures. Provincial governors and relevant authorities were instructed to strictly enforce all COVID-19 preventive guidelines. Any breach of quarantine regulations was considered a criminal offense and subject to penalties ranging from **fines of 3,000 to 6,000 dinars to imprisonment of up to three days**. Some governors also imposed stricter penalties, such as **temporary vehicle confiscation** for violators. In cases of repeated offenses, penalties were automatically increased.

- Additional penalties were applied under the Penal Code, particularly **Article 187**, which provides for **imprisonment from two to six months** and a **fine ranging from 20,000 to 100,000 dinars** for those who violate public health orders. (*Soubaila & Abdallah, 2023, p. 416*)

5.2 Treatment Protocol

The therapeutic approach adopted by the Algerian state to confront COVID-19, beginning on **March 23**, relied on the use of **chloroquine and hydroxychloroquine**. These drugs are known for their antiviral and antimalarial properties and are also used in the treatment of rheumatologic conditions. Their use was supported by early clinical results from France and China. Algeria implemented this treatment widely across most hospitals in the country. (*Naeem & Hanan, 2021, pp. 65–66*)

In addition, supportive medications were administered, including other antiviral agents, corticosteroids such as dexamethasone, and antibiotics in cases of secondary bacterial infection. For patients with low blood oxygen levels, oxygen therapy was provided either through nasal tubes or mechanical ventilation when necessary.

5.3 Vaccination

Algeria launched its COVID-19 vaccination campaign in January 2021. Priority was initially given to high-risk groups, including the elderly (aged 65 and above), healthcare professionals, and individuals with chronic illnesses. The government authorized the use of the following vaccines:

- **Sputnik V** (Russia)
- **Sinovac** (China)
- **Pfizer-BioNTech** (USA)
- **Astra Zeneca** (in limited cases)

However, it later became apparent that most of the adopted treatment approaches showed limited effectiveness and could pose long-term health risks. Furthermore, a significant portion of the population exhibited low responsiveness to the vaccines. This was observed even in cases where vaccination was mandated, such as for the issuance of travel visas or airline tickets.

6. Conclusion

Based on the analysis of the effectiveness of the measures adopted in managing the COVID-19 crisis in Algeria, it can be said that the efforts made were not without challenges. Several preventive steps were taken, such as enforcing lockdowns, increasing awareness campaigns, and opening field hospitals. These actions helped reduce the spread of the virus during certain periods. However, the weak healthcare infrastructure and lack of coordination among concerned institutions significantly limited the overall effectiveness of these measures.

The pandemic revealed the fragility of Algeria's national health system. Hospitals faced shortages in both medical staff and equipment, making it difficult to respond adequately to the rapid rise in infections. In addition, poor coordination between ministries and public institutions led to administrative confusion and delayed the national response to the crisis.

Moving forward, strengthening the healthcare system and improving coordination across all sectors must become top priorities. This experience should be used to develop flexible and sustainable health policies that are capable of responding to future health emergencies. It is also essential to invest more in health infrastructure, train medical personnel, and develop innovative solutions to address the problems that became evident during the COVID-19 crisis.

Recommendations:

- Activate crisis management systems and early warning mechanisms.
- Learn from the crisis and apply its lessons in future preparedness.
- Build a strong healthcare infrastructure for future emergencies.
- Promote solidarity and community cooperation in times of epidemics and disasters.
- Strengthen international cooperation with other countries and global organizations.
- Transition to a digital healthcare system and promote digitization in the health sector.

References

- Al-Afifi Al-Yafi, Nada Muwwadah. (2020). *Health Crisis Management: A Case Study of Qatar During the Coronavirus Crisis*. The Academic Journal for Research and Scientific Publishing, Issue 14, pp. 79–98.
- Ben Harath, Al-Arabi. (2021). *Hospital Classification as a Model to Enhance Organizational Performance and Improve the Quality of Health Services: A Case Study of the Public Hospital Institution of Relizane*. Doctoral Dissertation in Management Sciences, pp. 1–240.
- Bouamousha, Naïm, & Bechta, Hanan. (2021). *Algeria's Experience in Addressing the COVID-19 Pandemic*. Al-Midan Journal of Human and Social Sciences, Vol. 3, No. 2, pp. 59–74.
- Herat, Laila. (2020). *Lessons Learned from the Spread of the Coronavirus Pandemic*. Arab Organization of Supreme Audit Institutions (ARABOSAI), pp. 1–65.
- Zine El Abidine Bouacha. (2022). *Coronavirus in Algeria: The State's Strategy in Crisis Management*. Algeria: Dar Al-Ummah for Publishing and Distribution.
- Qenan, Souheila, & Boudour, Abdallah. (2023). *The Measures Taken by Algeria to Combat the Coronavirus*. Al-Mufakir Journal, Vol. 7, No. 1, pp. 404–418.
- Makssah, Louiza. (2020). *Legislative Measures for the Prevention of the COVID-19 Pandemic*. Journal of Life Sciences, Vol. 20, No. 26, pp. 285–304.
- Magdy Salah Taha Al-Mahdi. (2021). *Post-Corona Education: Reality and Future Prospects*. Egypt: Dar Al-Kitab Al-Hadith.
- Widad Abbas, & Dakkar, Jannat. (2021). *Algeria's Measures to Address the Dual Crisis: The Coronavirus Pandemic and Declining Oil Revenues*. Madarat Journal of Social and Human Sciences, issued by the University Center of Relizane, Issue 4, pp. 134–149.

Constitution of 2016.

Constitution of 2020.

Executive Decree No. 20-69, dated 26 Rajab 1441 AH (March 21, 2020), concerning prevention and control measures against the spread of the Coronavirus (COVID-19) pandemic.

Executive Decree No. 20-70, dated 29 Rajab 1441 AH (March 24, 2020), setting additional measures to prevent and combat the spread of the Coronavirus (COVID-19) pandemic.

Executive Decree No. 20-72, dated 3 Sha'ban 1441 AH (March 28, 2020), extending partial home quarantine to additional provinces.

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