

**Pandemic of Coronavirus (COVID-19) in Saudi Arabia**

**Author: Maryam Ahmed Awaji**

**Affiliation: Armed Forces Hospitals Southern Region, Khamis Mushyat**

## **Abstract**

### **Introduction**

Most cases of COVID-19 coronavirus infection occurred in the Chinese city of Wuhan at the end of December 2019 in the form of acute pneumonia. COVID-19 virus infects people of all ages. The most affected elderly people with underlying medical conditions. This may cause various symptoms such as fever, difficulty breathing, lung infection, coughing and sneezing.

### **Aim**

The aim of the present study to highlight the COVID-19 pandemic in Saudi Arabia.

### **Method**

A search was conducted using the relevant keywords to retrieve the studies conducted in Saudi Arabia regarding COVID-19. The search was by Google Scholar, Pub MED, and Twitter.

### **Conclusion**

The COVID-19 pandemic carries multiple-risk, and public health groups, such as the United States' Centres for Disease Control and Prevention (CDC) and the World Health Organisation (WHO), are monitoring the pandemic and posting updates on their website. These groups have also made recommendations on disease prevention and treatment, and according to the Saudi Centres for Disease Control, they have also included the necessary public health measures for mandatory reporting by calling a certain number and through the e-health monitoring network.

### **Keywords:**

Corona virus: COVID-19; Saudi Arabia; pandemic

## Introduction

Most cases of the new COVID-19 virus appeared in the Chinese city of Wuhan at the end of December 2019 in the form of acute pneumonia. COVID-19 affects people of all ages. However, evidence so far indicates that two groups of people are more susceptible to acute COVID-19 and are "elderly and people with underlying medical conditions" and the World Health Organization stresses that everyone should protect themselves from COVID-19 in order to protect others (1).

The Corona virus quickly spread across China, and the virus spread to more than 60 countries and infected nearly 90,000 patients by March 5, 2020. Based on data from 72,314 cases of Coronavirus 2019 (COVID-19), 14% of People with severe disease, 5% suffer from serious illness, and die 2 · 3%. 1 COVID-19 is not a conventional disease, and rapid changes were required in providing critical care to meet patients' needs. Health emergencies like a COVID-19 outbreak can be a major challenge for critical care physicians, who need strong comprehensive skills to respond effectively. CME-related continuing education plays an important role in preparing and responding to such emergencies (2).

The Kingdom of Saudi Arabia, with a population of 30 million, has taken drastic steps to contain the disease, stop international flights, close most public places, and suspend Umrah trips throughout the year. She called on Muslims to suspend the annual Hajj plans, pending further clarity on the pandemic. Movement restrictions were tightened, with entry and exit to Riyadh, Mecca, Medina, and Jeddah largely restricted. Some neighborhoods in Makkah and Madinah were already under a complete lock, as the first cases of corona virus were recorded in the Kingdom last month in the oil producing region of Qatif in the Kingdom.

Saudi Arabia has the largest number of injuries and deaths among the six Gulf Cooperation Council states, but public health officials say previous experience in combating Middle East Respiratory Syndrome (MERS) helped prepare the kingdom for the new Corona virus outbreak (3).

Dr. Tedros, Director-General of the World Health Organization (WHO) " said, on April 3, more than one million confirmed cases of COVID19 have been reported to the World Health Organization, including more than 50,000 deaths, But we know this is much more than a health crisis. We are all aware of the profound social and economic consequences of the pandemic" (4).

The aim of the current study to highlight pandemic of COVID-19 in Saudi Arabia.

### **Methodology**

A computer-based literature search was conducted using relevant keywords to retrieve studies conducted in Saudi Arabia Relating to COVID-19. Data collected from various journals indexed in Google scholar and Pub MED, twitter and some local unpublished master and doctoral theses. Selection criteria depended on the keywords of the review article.

### **Etiology**

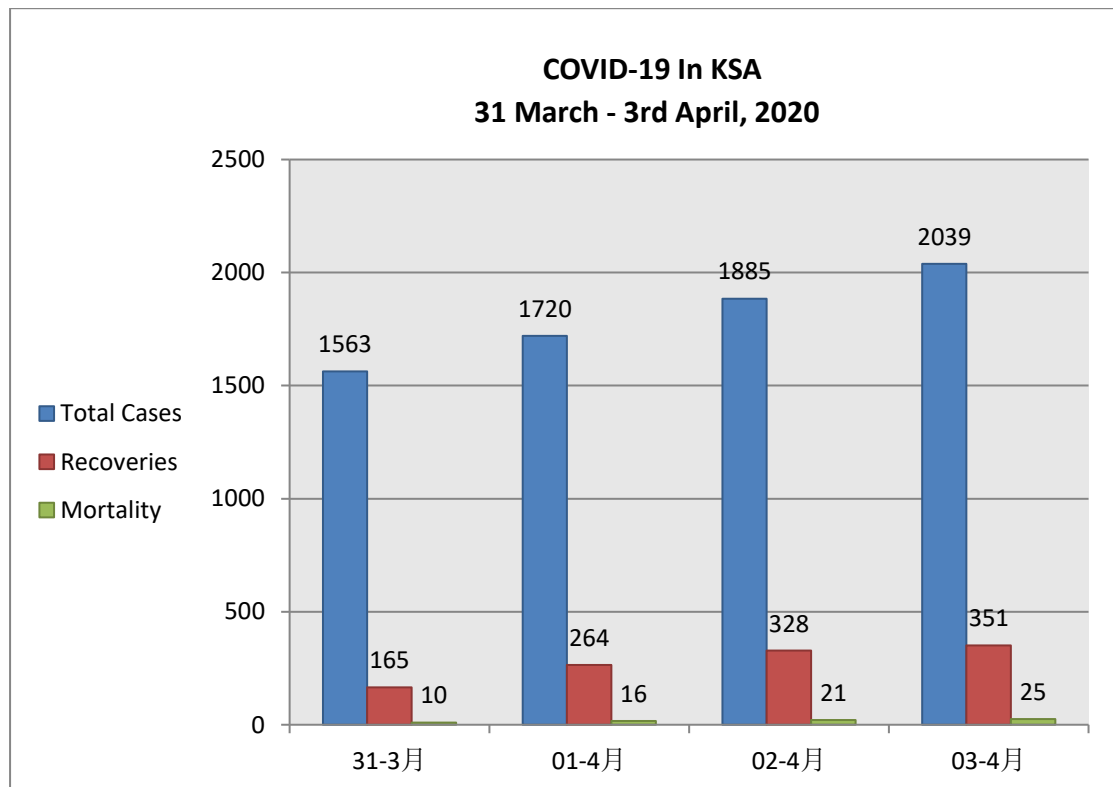
Corona virus belongs to a group of viruses that may cause various symptoms such as pneumonia, fever, difficulty breathing, lung infection, sneezing and coughing while in the animal it causes diarrhea and upper respiratory disease. Corona virus is transmitted from person to person or from person to animal through airborne droplets. These viruses are common in animals all over the world (5).

The World Health Organization (WHO) used the term new corona virus to refer to the corona virus, which affects the lower respiratory tract of pneumonia patients in Wuhan, and the World Health Organization announced that the official name of the new corona virus for 2019 is (COVID-19). The current reference name of the virus is acute respiratory syndrome (6).

## Timeline

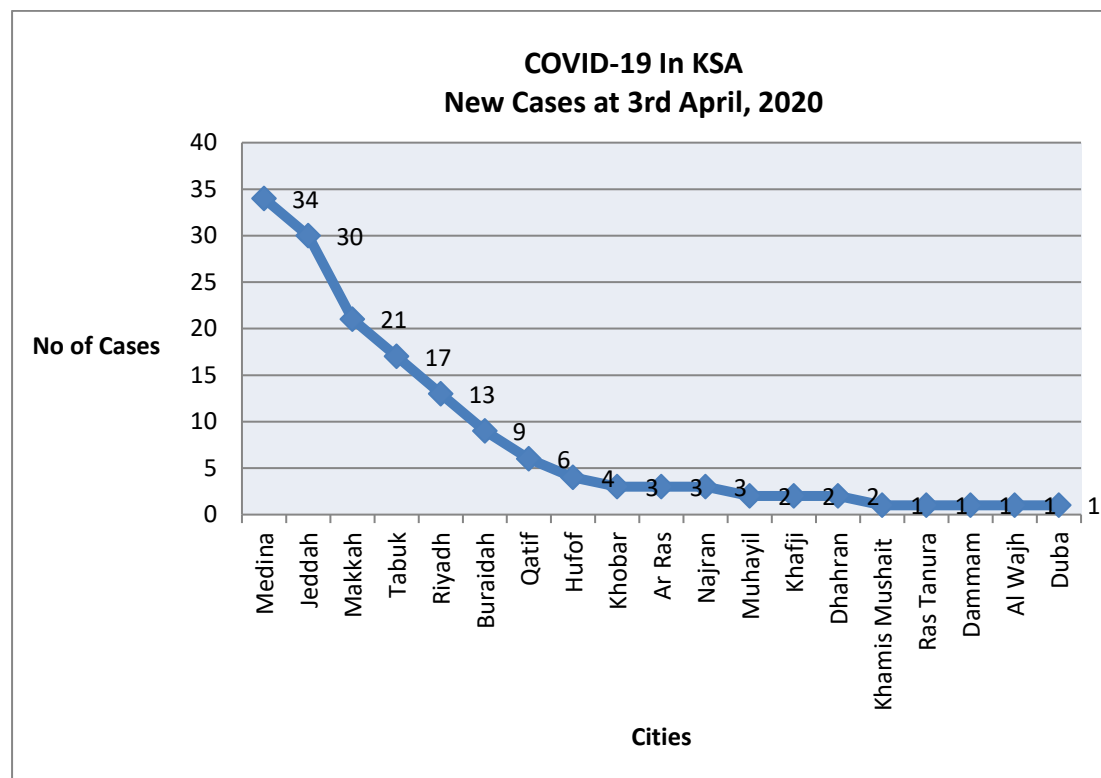
Saudi Arabia confirmed that the first case of COVID-19 on March 2, 2020 was in Qatif, a Saudi national returning from Iran via Bahrain (7).

**Figure 1. Description of Corona virus (COVID-19) in Saudi Arabia since March till 3<sup>rd</sup> of April, 2020.**



The number of cases in the Kingdom of Saudi Arabia since March till April 3<sup>rd</sup> of April 2020, reached 2039 cases, where 351 cases were cured, and the death toll reached 25 people, according to the Ministry of Health sources (8).

**Figure 2. Description of New Cases of Corona virus (COVID-19) among cities in Saudi Arabia at 3<sup>rd</sup> of April, 2020.**



The line graph showed the total number of new COVID-19 cases among cities in Saudi Arabia on April 3. The highest rate of infection was recorded in Madinah, 34 cases, followed by 30 cases in Jeddah, while the lowest was in Ras Tanura, Dammam, Al Wajh and Duba.

The Kingdom of Saudi Arabia imposed a 24-hour curfew in the cities of Mecca and Medina, and extended measures to combat the spread of the Corona virus, which infected more than 2,039 people in the Kingdom and resulted in the death of 25 people.

An official source in the Saudi Ministry of Interior clarified that, based on the order of the Custodian of the Two Holy Mosques King Salman bin Abdulaziz, to prevent curfews to limit the spread of the Corona virus, the order includes exceptions related to curfews, namely: First: The vital activities excluded from the application of the curfew: the food sector, such as catering, supermarkets, vegetable and poultry shops, meat, bakeries, factories, and food factories, the health sector, such as pharmacies, hospitals, laboratories, factories, materials factories, and medical devices, the media

sector with its various means. Second: Allow movement during the curfew time for security, military and health cars, government regulatory service vehicles, and activity vehicles excluded in the first item. Third: Enabling the use of delivery through smart device applications (express delivery services) during curfew, to request food and drug needs and other essential goods and services that are excluded and delivered to homes. Excluded activities can be found by calling the toll-free number in all regions of the Kingdom 999, except for the Makkah Al-Mukarramah region, which is called by number 911. Fourth: Allowing the muezzins to reach the mosques to lift the call to prayer at the time of the curfew (9).

For More Updates Visit:

<https://covid19.cdc.gov.sa/ar/daily-updates-ar/>.

### **Prevention measures to stop COVID-19 in Saudi Arabia**

The Kingdom of Saudi Arabia has taken several measures to combat the spread of the Corona-19 Corona virus since the outbreak began for the first time earlier this year, with 25 deaths recorded so far. Part of the measure the Kingdom has taken includes the suspension of small seasonal pilgrimage trips to national and foreign worshipers to introduce a ban on the country and the creation of a partial curfew to slow the spread of the Corona virus.

On February 27, 2020, the Ministry of Foreign Affairs of the Kingdom of Saudi Arabia temporarily suspended entry to the Kingdom of Saudi Arabia for the purpose of Umrah and visiting the Prophet's Mosque in addition that the Kingdom of Saudi Arabia took all measures. This decision reflects the concerns and unpredictability of developing COVID-19; however, its recent extension to the Middle East, especially Iran, to Europe, especially Italy, France and Germany, and some Asian countries, especially Malaysia and Singapore, indicates that it may last for ten months next too (10) .

The Kingdom of Saudi Arabia announced further precautionary steps to close schools and universities, "and the Minister of Education ordered the activation of virtual schools and distance education while schools are closed to ensure the continuation of the educational process in an effective and quality manner" (11).

International flights suspended, public sector offices shut down except for health and security and regulating remote financial sector office work , Jumah prayer suspended and mosques closed and regulating remote work for the private sector , surrounding areas of the 2 holy mosques closed , domestic flights suspended , national wide curfew (6am-7pm).

Lockdown of Riyadh, Makkah and Madina and Increasing curfew hours (6am-3pm).  
Lockdown of some the Medina suburbs, extending the suspension of (governmental and private sectors, international and domestic flights and local transportation).

Jeddah lockdown, provide free care to corona virus infected individuals from citizens and residents, and lockdown of some of Makkah suburbs. Exception of pharmacies and supermarkets.

Ministry of Interior in the Kingdom of Saudi Arabia announced that anyone who violates the curfew in the Kingdom of Saudi Arabia will be fined 10,000 Riyals (\$ 2663) and may face imprisonment if the law is repeatedly broken (12).



**Figure 3. Response Action of Saudi Arabia during COVID-19**

<b>Date of onset</b>	<b>KSA Responses</b>
Day 2	First case detected
Day 4	Umrah closure
Day 8	Qatif lockdown/Enforcement of remote education
Day 13	Who announced Covid-19 Pandemic
Day 15	International flights suspended
Day 16	Public sector offices shutdown except for health and security/Regulating remote financial sector office work
Day 17	Jumah prayer suspended and mosques closed /Regulating remote work for private sector
Day 19	Surrounding areas of the 2 holy mosques closed
Day 21	Domestic flights suspended
Day 22	Local transportation regulated
Day 23	National wide curfew (6am-7pm)
Day 25	Lockdown of Riyadh, Makkah and Madina and Increasing curfew hours (6am-3pm)
Day 28	Lockdown of some the Medina suburbs, extending the suspension of (governmental and private sectors, international and domestic flights and local transportation)
Day 29	Jeddah lockdown
Day 30	Provide free care to corona virus infected individuals from citizens and residents including illegal works and lockdown of s Makkah and Madina city

Saudi Arabia has taken several preventive measures to stop the Corona Virus (COVID-19). Health precautions were carried out with suspected cases, as well as continuous disinfection and sterilization of all facilities.

The purpose of this reserve in the Kingdom of Saudi Arabia is to reduce the spread of the Corona virus.

These precautions will reduce fatigue among health care providers and delay potential viral and immune changes in the disease (13).

Director-General of the World Health Organization (WHO) Dr. Tedros, said "This is what health means for everyone!" Many thanks to King, Salman for your leadership and commitment to ensuring that everyone has the health services needed to fight COVID19. Hope other countries follow suit! Solidarity!"

The Kingdom of Saudi Arabia has represented what should be the government that puts the interests, safety, security and priorities of its citizens as the most urgent matters.

### **Conclusion**

Saudi Arabia and other Gulf states have relatively succeeded in containing the virus, but the infection has gone out of control in Iran, United States and most of Europe (14).

These measures may prevent the entry of Coronaviures (COVID-19) cases, history taught us that this measures not fully effective in preventing virus introduction into a country. Saudi CDC, and other public health measures include obligatory reporting of Healthcare Financial Services (HCFs ) through the Health Electronic Surveillance Network and by calling a specific number (15).

## **Recommendations**

- ❖ Many people are making great sacrifices to Stay Home & protect their health & that of others from COVID19.

Here some ideas to stay healthy at Home:

- Read Holy Quran
- Eat healthy
- Be active
- Don't smoke
- Read books
- Meditate
- ❖ Hand washing is an effective way to prevent COVID19.
- ❖ Avoid touching your mouth, eyes, nose before washing hands.
- ❖ Avoid contact people having signs of a cold, flu, or cough.
- ❖ Avoid dealing with animals.
- ❖ When feeling tired call 937 Ministry of health or visit the nearest health facility.

## **CONSENT**

It is not applicable.

## **ETHICAL APPROVAL**

It is not applicable.

## **COMPETING INTERESTS**

Author has declared that no competing interests exist.

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