



# SCIENTIFIC RESEARCH MONITORING ON COVID-19

30 AUGUST 2022

For accessing the full series of published scientific reports please visit the following link:  
<https://www.doh.gov.ae/ar/covid-19/Healthcare-Professionals/Scientific-Publication>

# SCIENTIFIC RESEARCH MONITORING ON COVID-19

## (Issue 443)

Abu Dhabi Public Health Center (ADPHC) is gathering the latest scientific research updates and trends on coronavirus disease (COVID-19) in a monthly report. The report provides summaries on breakthrough or updated research on COVID-19 to allow health care professionals and public health professionals get easy and fast access to information.

Click on icon to view content



Research

Titles



Statistics



Articles

Summary

**Note :** All articles presented in this report represent the authors' views and not necessarily represents Abu Dhabi Public Health Center views or directions. Due the nature of daily posting , some minor language errors are expected. For further inquiries you may communicate with us as [PHR@adphc.gov.ae](mailto:PHR@adphc.gov.ae)



The views and opinions expressed in this report are those of the authors and do not reflect the official policy or position of the Abu Dhabi Public Health Center (ADPHC).

Click on icon to view content

COVID-19 in Women's  
health: Epidemiology

COVID-19 and women's  
health: Examining  
changes in mental  
health and fertility



Figure 1: Total Number of Infected, Recovered, and Death Cases

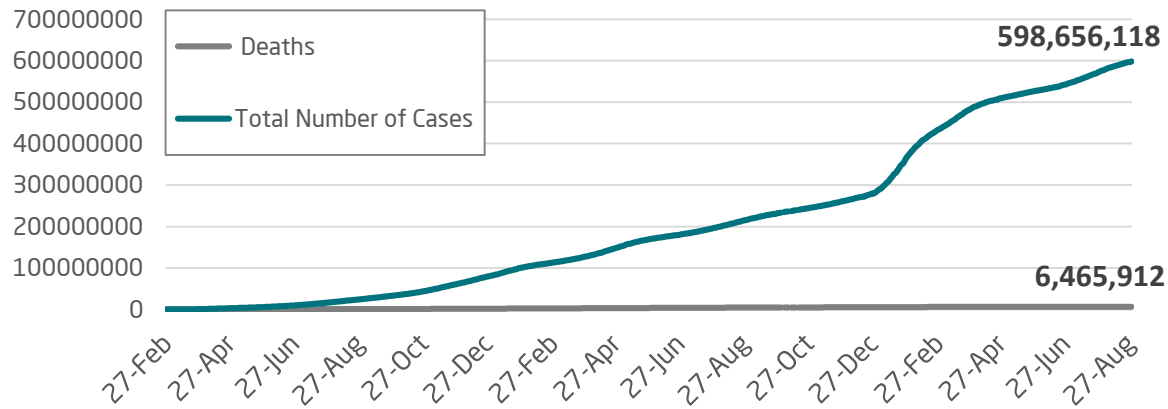


Figure 3: % of people vaccinated fully & partly against COVID-19

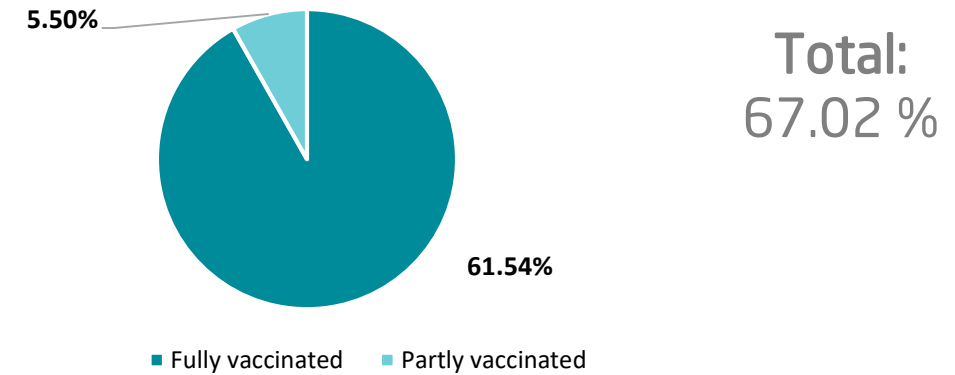


Figure 2: Daily New Infected COVID-19 Cases

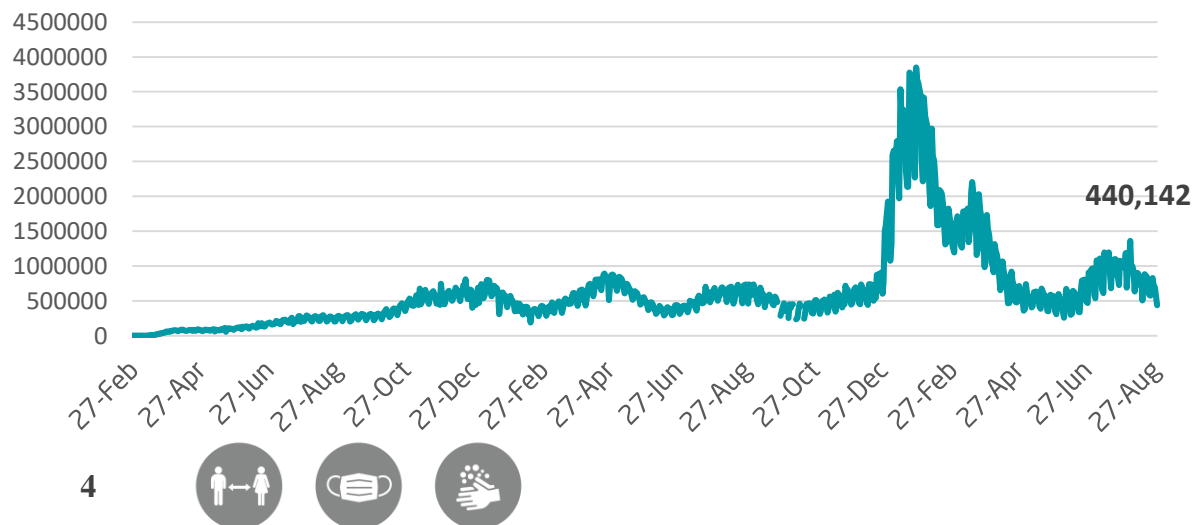
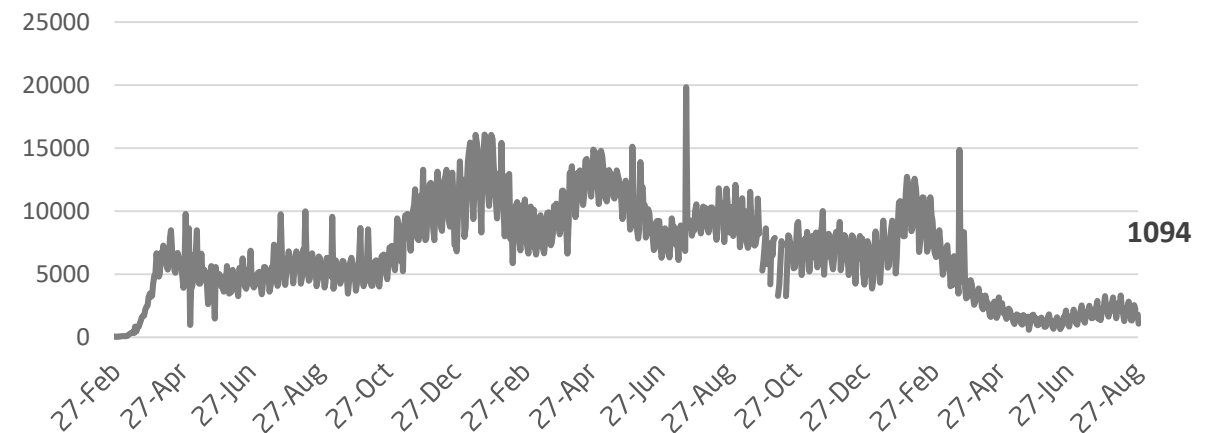
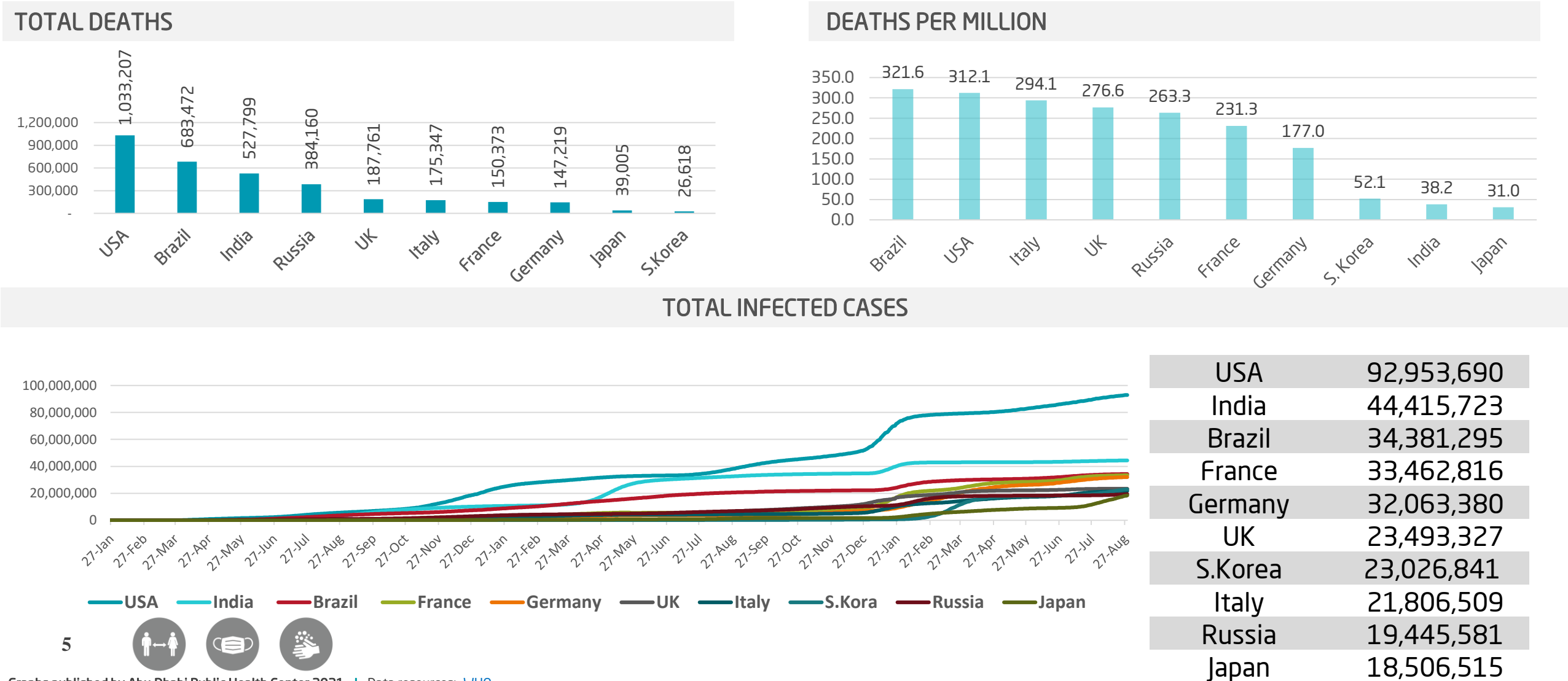


Figure 4: Global Daily New Deaths Due to COVID-19

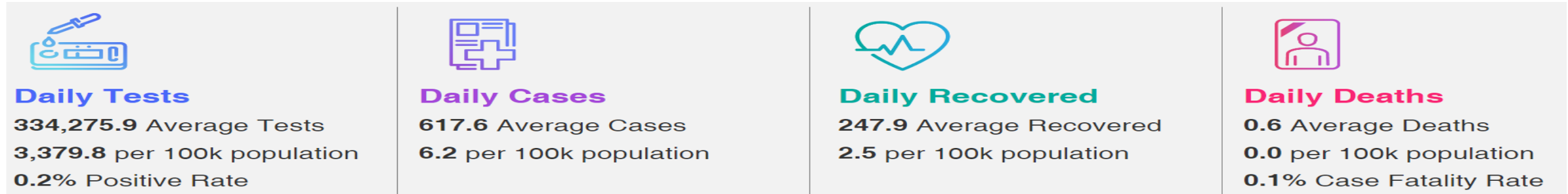


## Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19

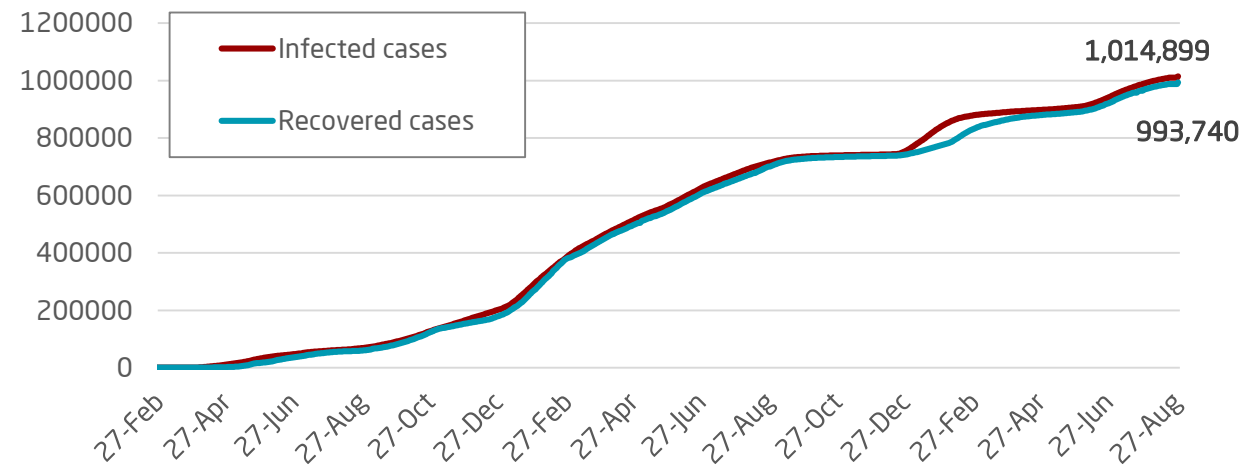




**Figure 8: COVID-19 Status in the UAE** (Federal Competitiveness and Statistics Authority Dashboard). (Last update on April 2022)



**Figure 6A: TOTAL Number Of Infected And Recovered Cases Due To Covid-19 Reported By The UAE**



**Figure 6 B: TOTAL NUMBER and Percentage of UAE population Vaccinated**

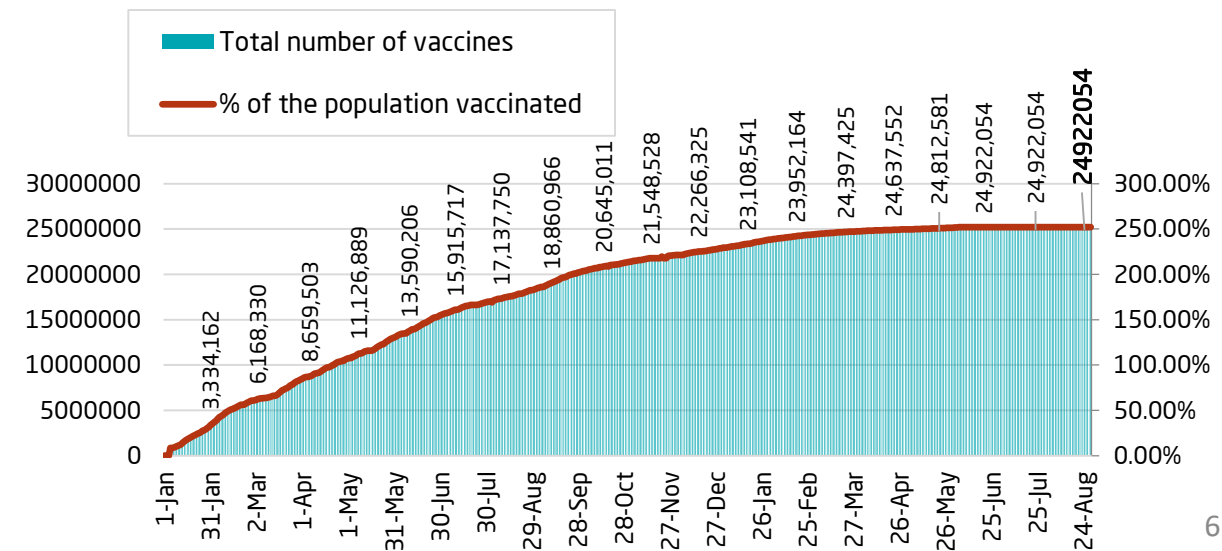




Figure 7A : Global Distribution of COVID-19 Cases

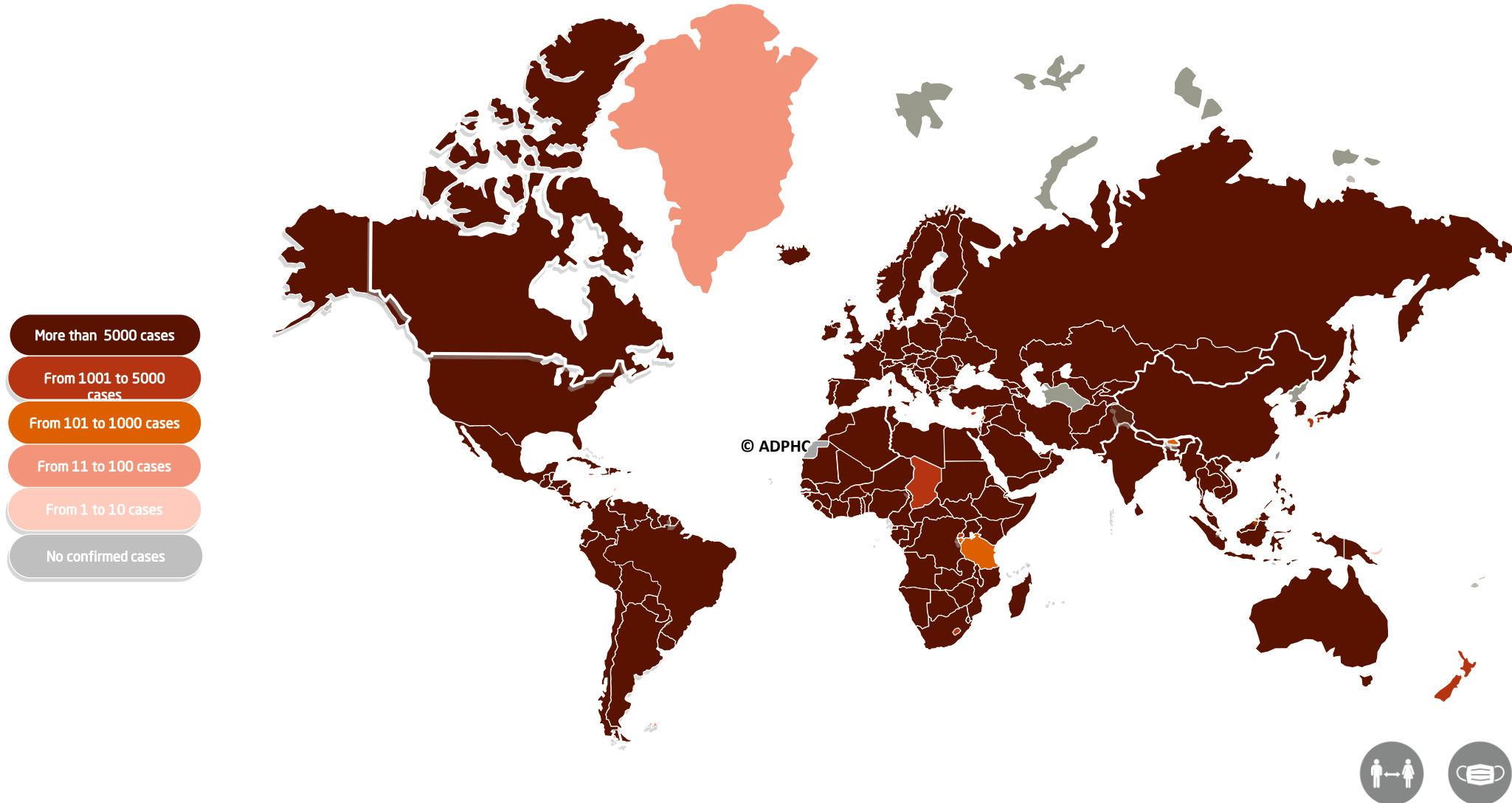
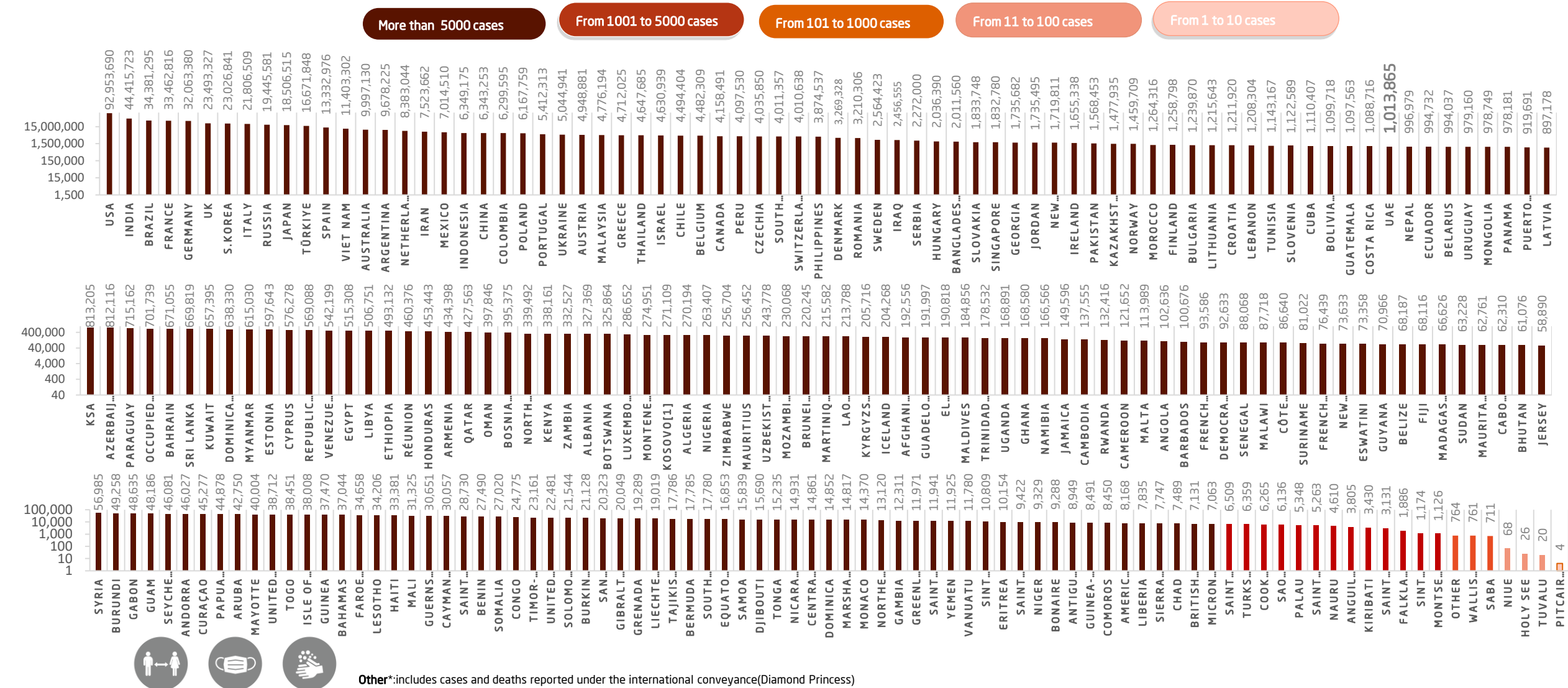




Figure 7B: Bar Chart Illustrates the Global Distribution of COVID19 Cases



Graphs published by Abu Dhabi Public Health Center 2021 | Data resources: [WHO](https://www.who.int/)

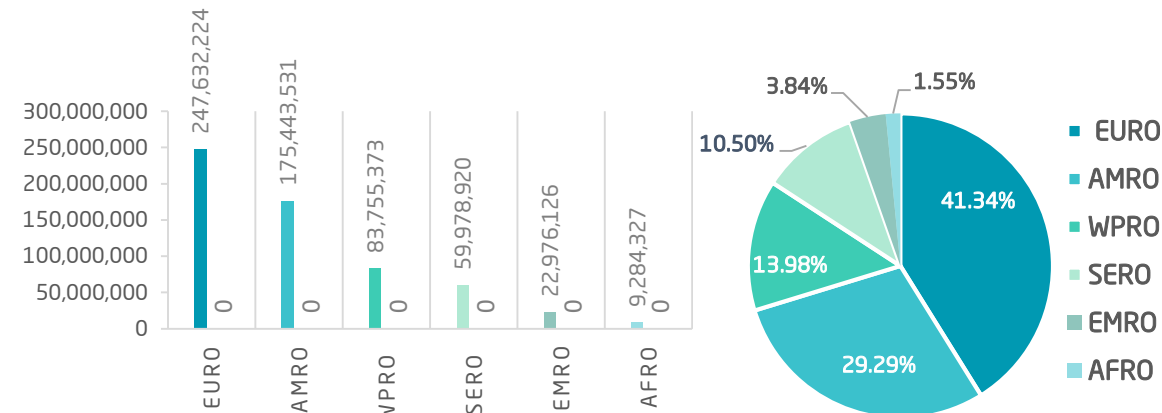




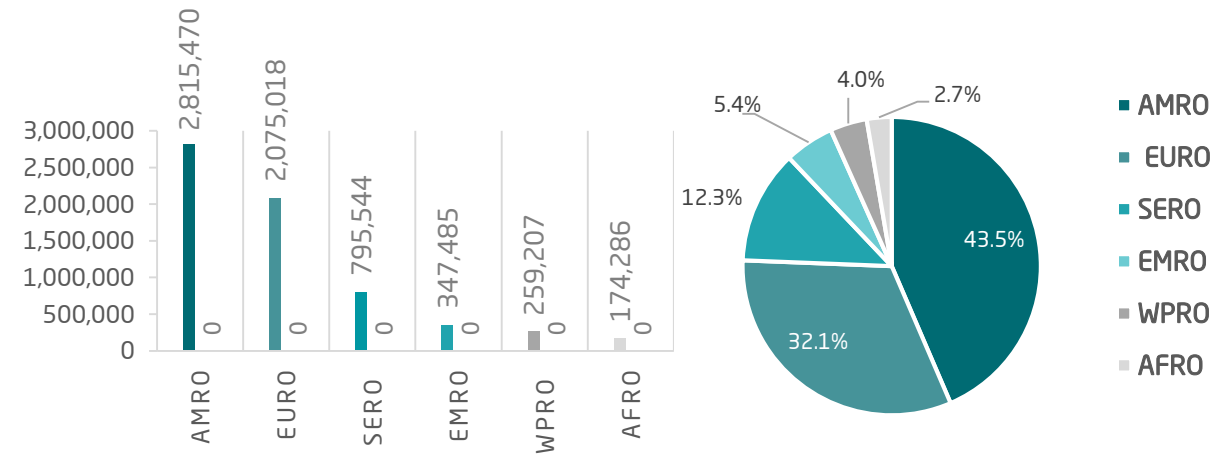
Figure 8: Global Distribution of COVID-19 Cases per Region



## INFECTED

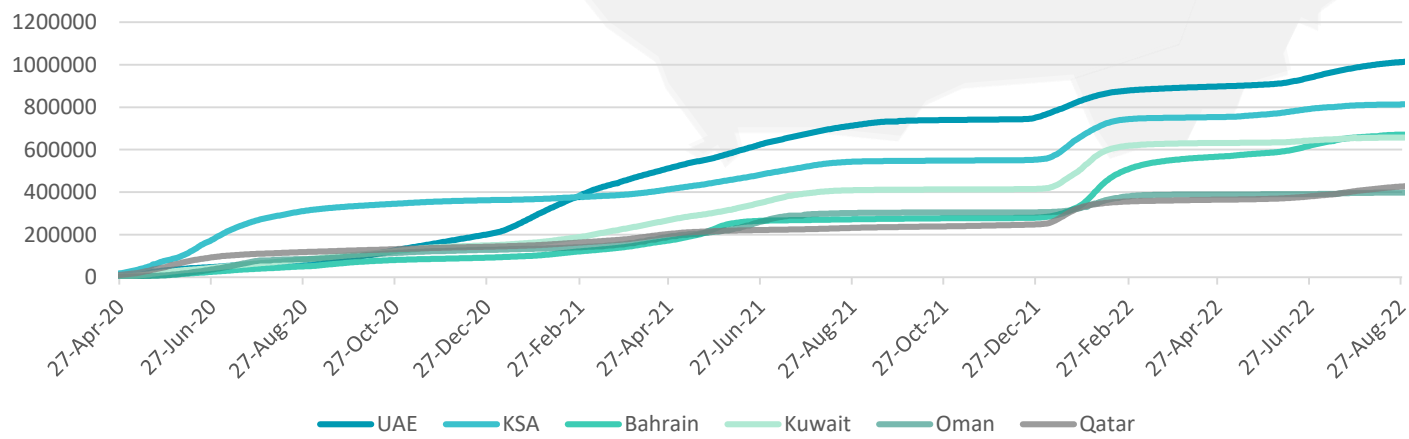
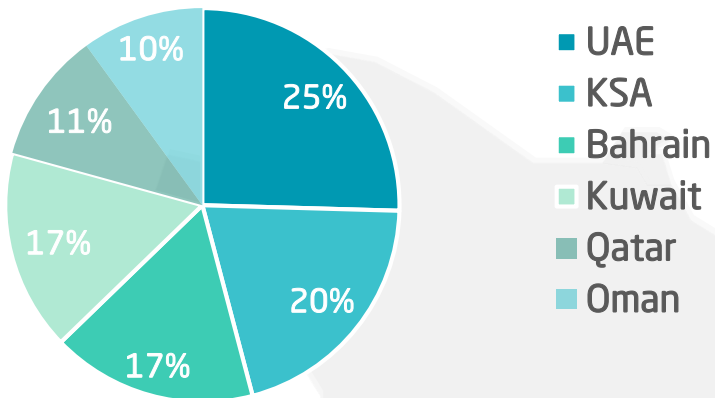


## DEATHS

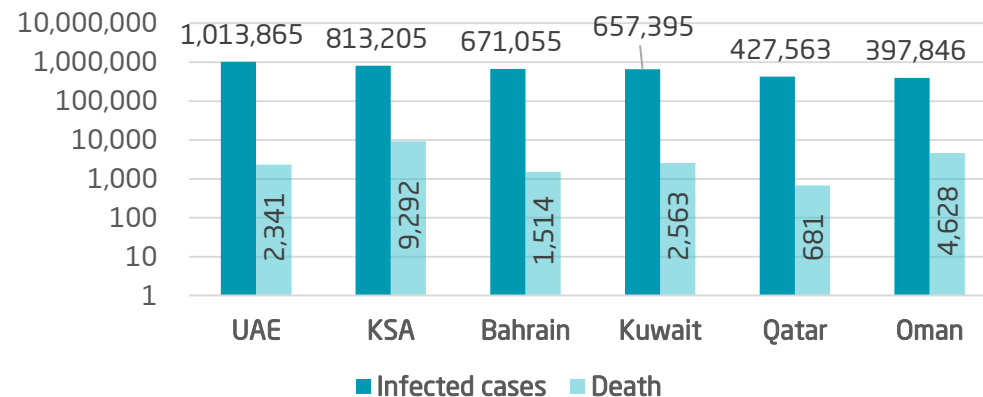


## Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

### TOTAL NUMBER OF INFECTED CASES



### TOTAL NUMBER OF INFECTED, RECOVERED AND DEATHS



### DEATHS PER MILLION

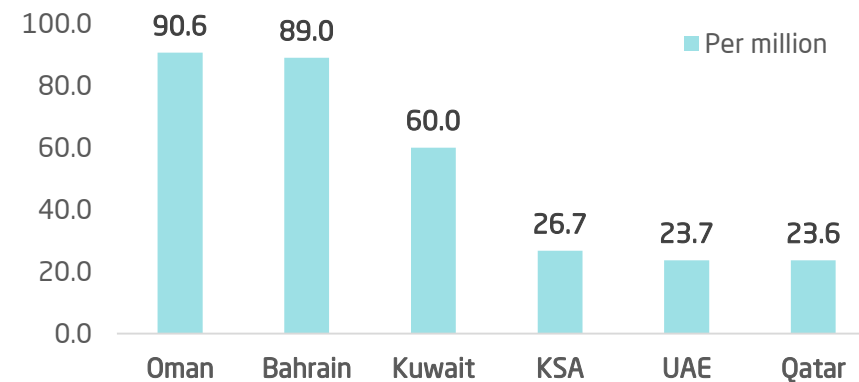




Figure 10: Comparative Analysis of the Distribution of COVID-19 New Cases in GCC Countries

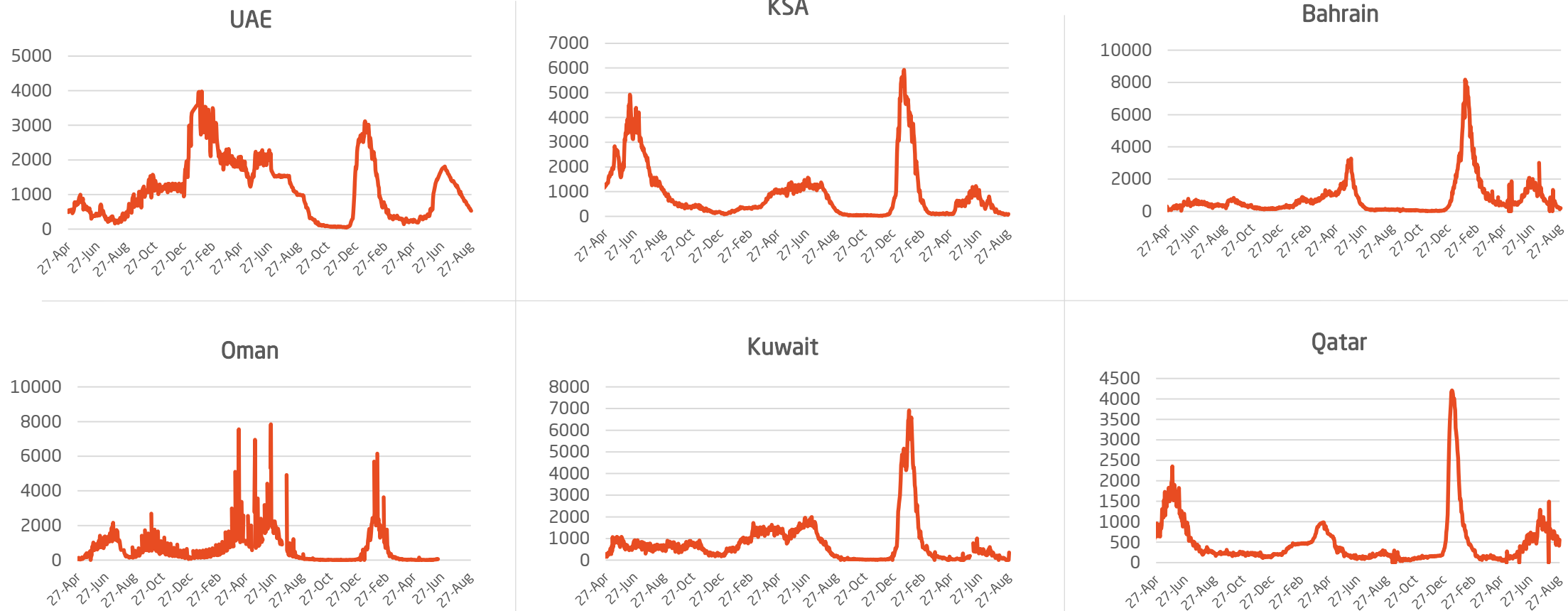
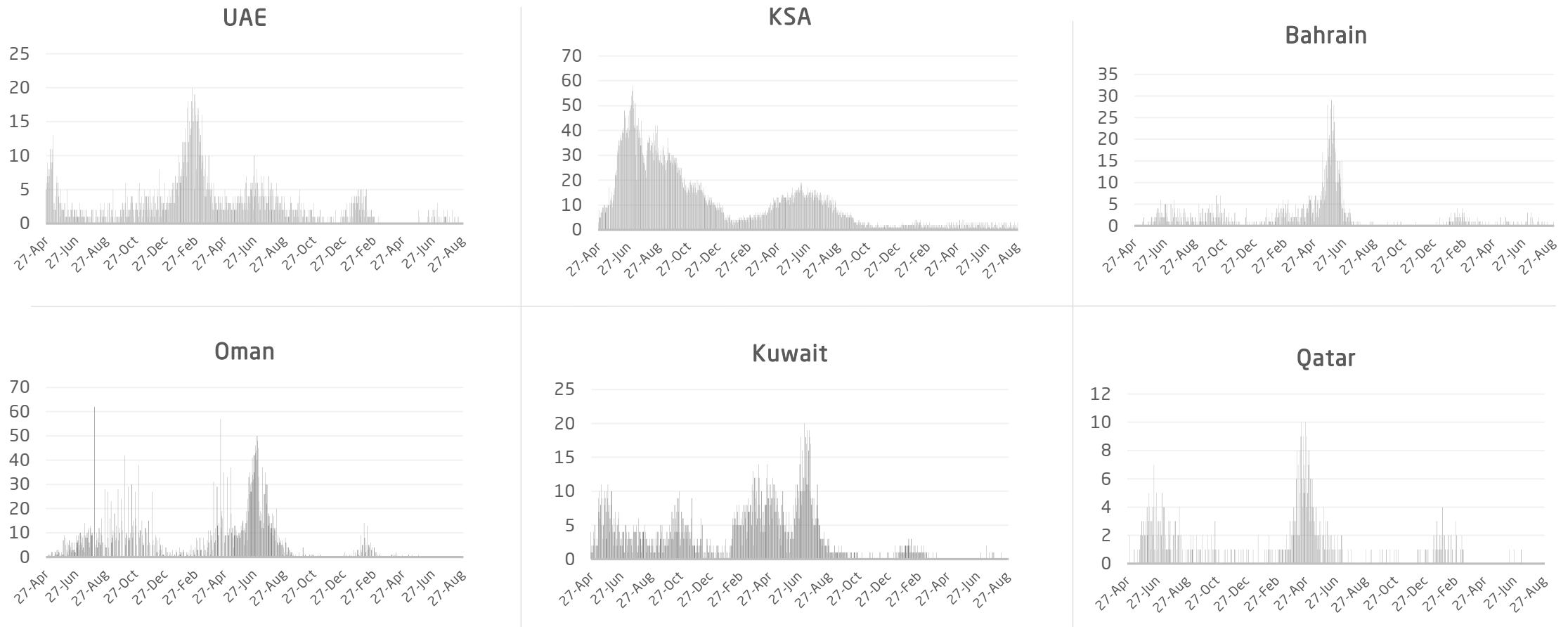




Figure 11: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries



- Background: Coronavirus was first seen in 1960s causing mild and self-limiting illness, but can be severe in the very young, very old and immunocompromised population. Two coronaviruses—SARS-CoV and MERS-CoV—first appeared in humans in the 21st century. Both had a small-scale outbreaks of severe and a high mortality rate. This study was conducted in UK Effects of COVID-19 infection. The average incubation period is 15.1 days with majority as asymptomatic.
- Effects on all women: It was estimated that men had a higher risk of dying from COVID-19 than women.
- Effects on pregnant women: All pregnant women are at increased risk. Unlike the general population, pregnant women are less susceptible to the virus. However, like the general population, the majority of infected pregnant women will either show no symptoms or have mild to severe cold/flu-like symptoms. These symptoms include fever (40%), cough (39%), shortness of breath, muscle pain, loss of taste sense, diarrhea in more than 10% of the pregnant women. In the latter stages of pregnancy, it's common for the women to suffer from severe disease and are five times at risk of ICU admission. Women with COVID-19 who gave birth are at higher risk for ICU admission (3.3%), mechanical ventilation (1.3%), and mortality (0.1%) than those without COVID-19. Women who are very ill with COVID-19 are at 16.2% risk of preterm birth. Women who are admitted to the hospital with COVID-19 symptoms are 11 times at risk of preterm birth.
- Effect on babies in the neonatal period: In neonate, the course of infection is mild. Forty-two percent of neonates had severe COVID-19 (abnormal X-ray with signs of infection, positive PCR), 2% died and 88% were discharged.
- Risk factors for severe COVID-19 infection: These risk factors include Black, Asian and minority ethnic (BAME) background; BMI  $\geq 25$  kg/m<sup>2</sup>; comorbidities (diabetes and hypertension); increased age, pregnant women at  $\geq 35$  years-old; living at increased socioeconomic deprivation; working in healthcare or public-facing occupations. A higher percentage of BAME women were hospitalized with COVID-19.
- Ethnic and socioeconomic inequalities: Compared to the White ethnicity, BAME group had a higher death rate (Black adjHR 1.71, Asian adjHR 1.62, mixed ethnicity adjHR 1.64). The risk of death increased linearly with increasing deprivation (HR 1.79) when compared to those who were the least deprived. Thirteen percent of UK are of BAME group and 34% of them were admitted to the ICU, similar results with pregnant women. African American/Black and Hispanic people showed a greater risk of COVID-19 infection, hospitalization, and death compared to non-Hispanic White and Asian ethnicity in a systemic review conducted in the USA.





Continued

- Summary:** The current COVID-19 pandemic has spread quickly throughout the world. It is spread through droplet or aerosol transmission, direct contact with an infected person or contaminated surface. Protective gear, social isolation and restriction may help to decrease transmission, but vaccination offers a vital role in lowering infection rates and ending the epidemic. Childbearing women may have no to mild COVID-19 symptoms. However, women at a latter pregnancy stage might develop a severe disease and may require ICU admission. Neonates has a mild course of infection. Women who are with BAME ethnicity, obesity, diabetes, hypertension, high deprivation are at higher risk of severe disease and death.

**Table 1**

Estimates of association between risk factors and severe COVID-19 illness in pregnancy, from PregCOV-19 Living Systematic Review [30].

Risk factor	Associated odds ratio of severe COVID-19 illness in pregnancy (95% CI)
Maternal age 35 years and older	1.78 (1.25–2.55)
BMI 30 kg/m <sup>2</sup> and above	2.38 (1.67–3.39)
Chronic hypertension	2.00 (1.14–3.48)
Pre-existing diabetes	2.51 (1.31–4.80)

BMI = Body Mass Index.





- Introduction:** COVID-19 had several consequences in Mexico such as Mexican economy and underemployment. Anxiety and depression are exacerbated by social isolation. This essay examines how the COVID-19 stay-at-home order affects decisions about fertility and mental health. Mental health issues and decisions about family planning may be impacted by unemployment. Access to abortion services and pregnancy decisions are also impacted by limited healthcare access during the pandemic. Since there will be less social interaction, more stress, and more alcohol intake during the epidemic, mental health may deteriorate.
- Background:** On March 11, 2020, WHO declared COVID-19 as pandemic. Most of the events in Mexico happened in the following weeks. On March 16, the Mexican Minister of Education decided that schools would be closing, which resulted in a decrease in mobility in Mexico City. The formal order to stay at home was released on March 23 by Mexico's Council of General Health. Mobility fell by 70% in Mexico City when the shutdown started.
- Data:** This study used administrative data from Mexico City's Línea Mujeres, a 24-hour government-funded call-center, to determine how the COVID-19 shutdown affected decisions about fertility (pregnancy and abortion) and mental health (anxiety and depression). Data collected from January through May of 2019 and 2020. During the pandemic, the anxiety (88%) and pregnancy calls increased while the abortion calls (80%) decreased. No statistically difference in depression calls and call volume.

Figure 1: Event Study: Main Findings

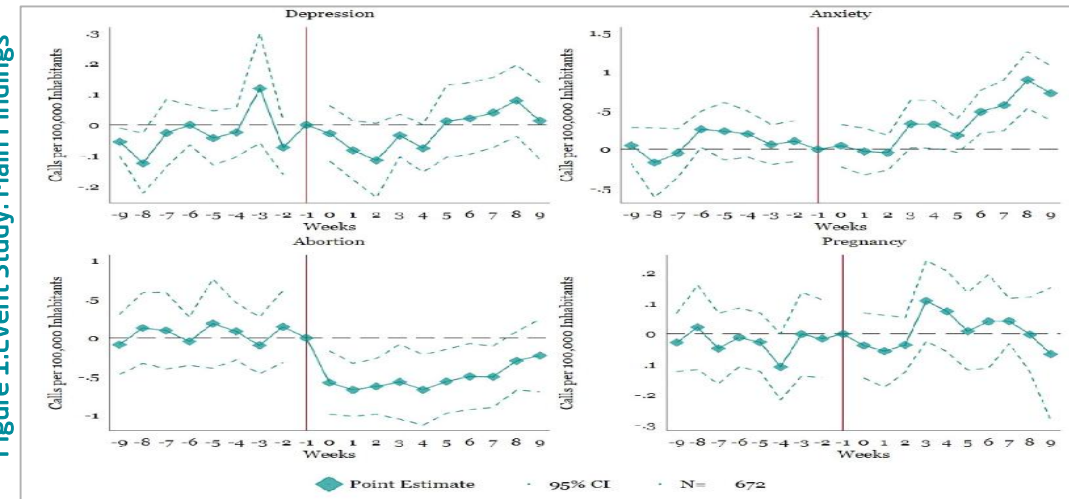
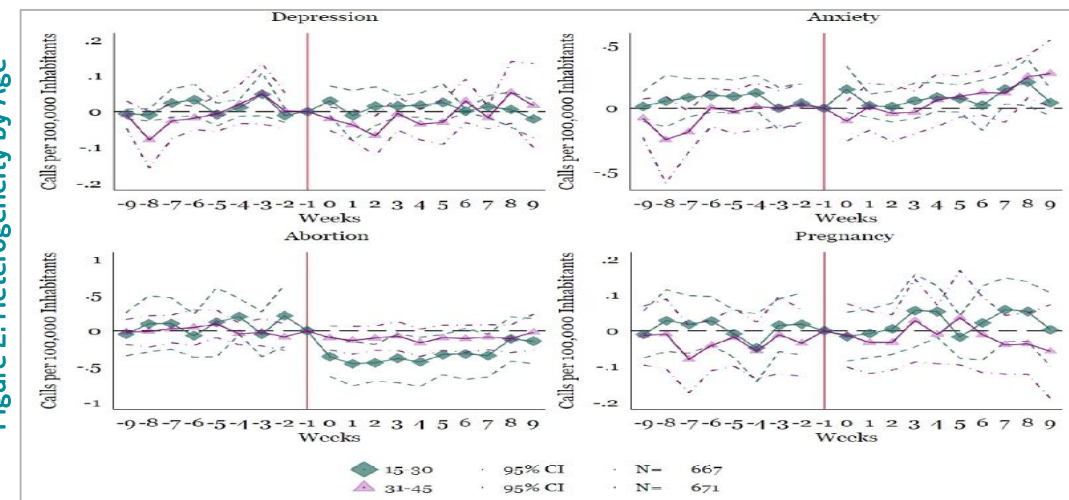


Figure 2: Heterogeneity by Age



- **Results:** Anxiety calls have significantly increased since week three with no change in depression calls. Abortion calls has dropped in the first week but returned back to baseline level by week 7. Pregnancy calls did not change steadily.
- **Heterogeneous effects:** This was done to see if the outcomes changes with age and education. The results showed a decrease in abortion calls in women (15-30 years-old) with high school degree. Anxiety calls has increased in women (>45 years-old) regardless of education.
- **Conclusion:** These results suggest that the stay-at-home order resulted in a worsening of mental health. Anxiety increased, especially in people over 45. While abortions calls decreased especially among women (15-30 years-old) with a high school education, reproductive health services for pregnancy remained consistent. Orders to stay at home can cause higher rate of anxiety and changes in fertility decisions in women. These results show that these worries are legitimate, indicating that more may be done to lessen the financial and psychological pressure.

**Table 1**

Descriptive statistics.

	2019			2020		
	Weeks 1-11 Mean	Weeks 12-21 Mean	Difference Est.	Weeks 1-11 Mean	Weeks 12-21 Mean	Difference Est.
Depression	0.046	0.046	-0.000	0.077	0.090	0.013
Anxiety	0.253	0.263	0.010	0.323	0.609	0.286***
Abortion	0.233	0.229	-0.004	0.651	0.110	-0.540***
Pregnancy	0.044	0.049	0.005	0.040	0.080	0.040**
N	176	160	336	176	160	336

Source: Línea Mujeres. Notes: Significance levels: \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .





مركز أبوظبي  
للصحة العامة  
ABU DHABI PUBLIC  
HEALTH CENTRE



#### ACKNOWLEDGMENT

##### EDITORS

Dr Shereena Al Mazrouei . MBBS, MPH - (ADPHC).  
Dr Maha Al Safi - MBBS - (ADPHC).

##### TEAM

Hanan Al Mutairi, BSPH - (ADPHC).  
Shahad Al Shamlan, BSPH - (ADPHC).  
Ahlam Al Maskari , BSPH- (ADPHC).

##### CONTRIBUTORS

Dr. Zohour Anouassi, MHE, BCPS - (CCAD).  
Esrat Zahan Khan - (ADU).



[WWW.ADPHC.GOV.AE](http://WWW.ADPHC.GOV.AE)