

SCIENTIFIC RESEARCH MONITORING ON COVID-19

19 OCTOBER 2020

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SCIENTIFIC RESEARCH MONITORING ON COVID-19

(ISSUE 530)

Abu Dhabi Public Health Center (ADPHC) is gathering the latest scientific research updates and trends on coronavirus disease (COVID-19) in a daily 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.

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Research
Update



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.

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RESEARCH UPDATES

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).

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Public Health Response

Long-term Health Consequences of COVID-19

Public Health Response

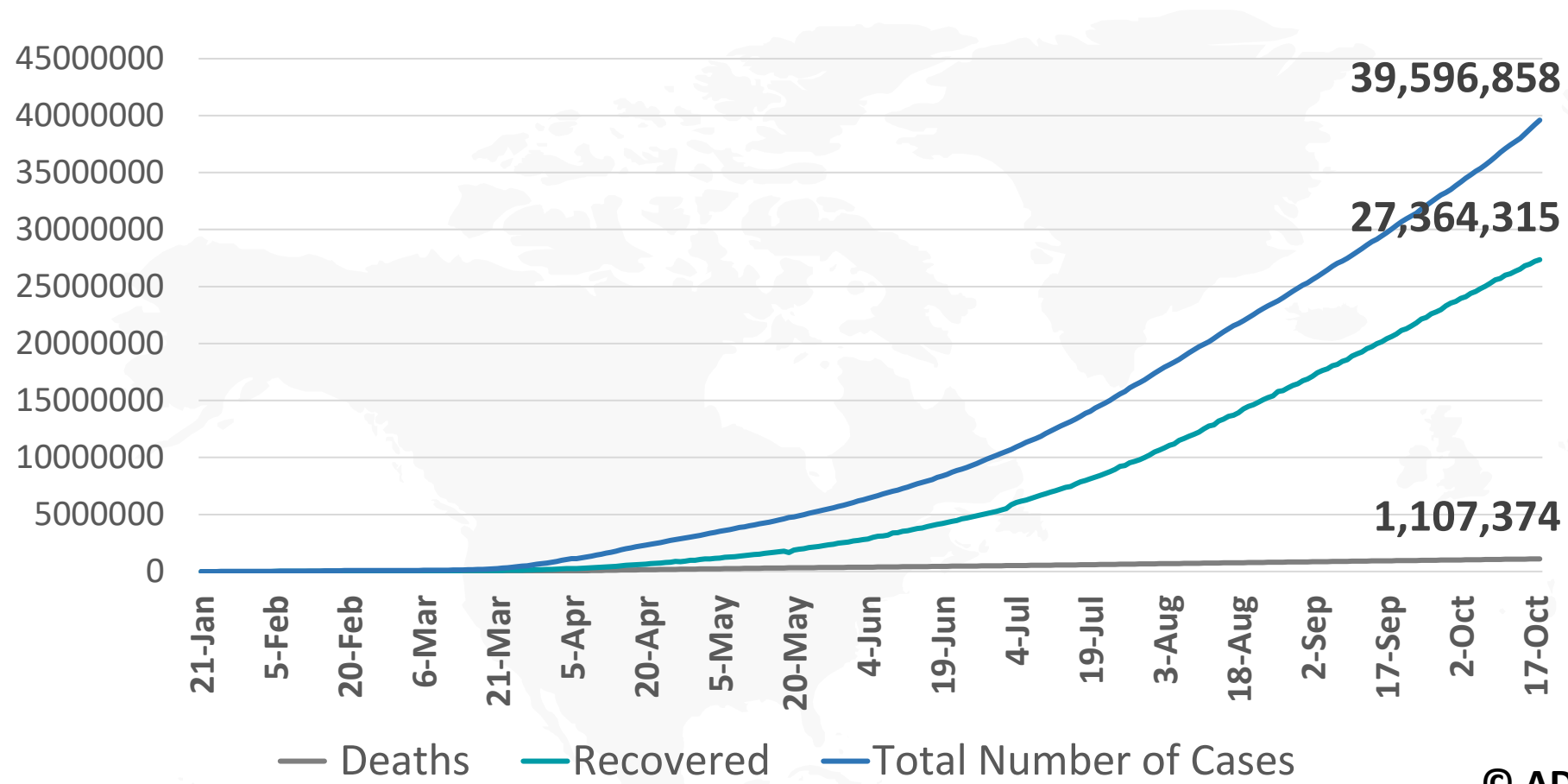
Preserving and Promoting Competition in the Post-Coronavirus Disease 2019 Healthcare Delivery System

Public Health Response

Lack of Safeguards in Response to Restrictive Public Health Measures



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



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Figure 3: Total Number of Death Due to COVID-19 (china and result of the world)

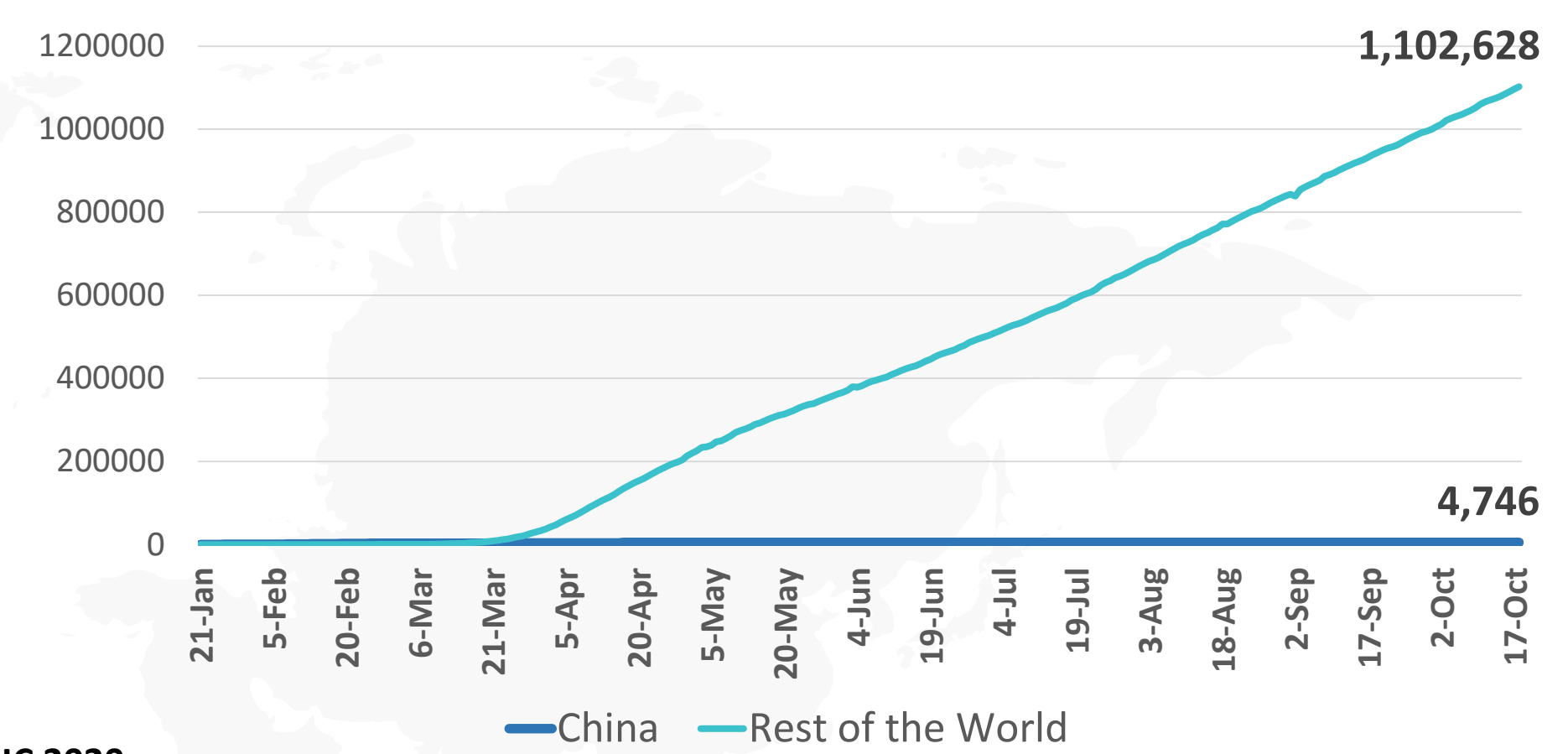


Figure 2: Daily New Infected COVID-19 Cases (China and rest of the world)

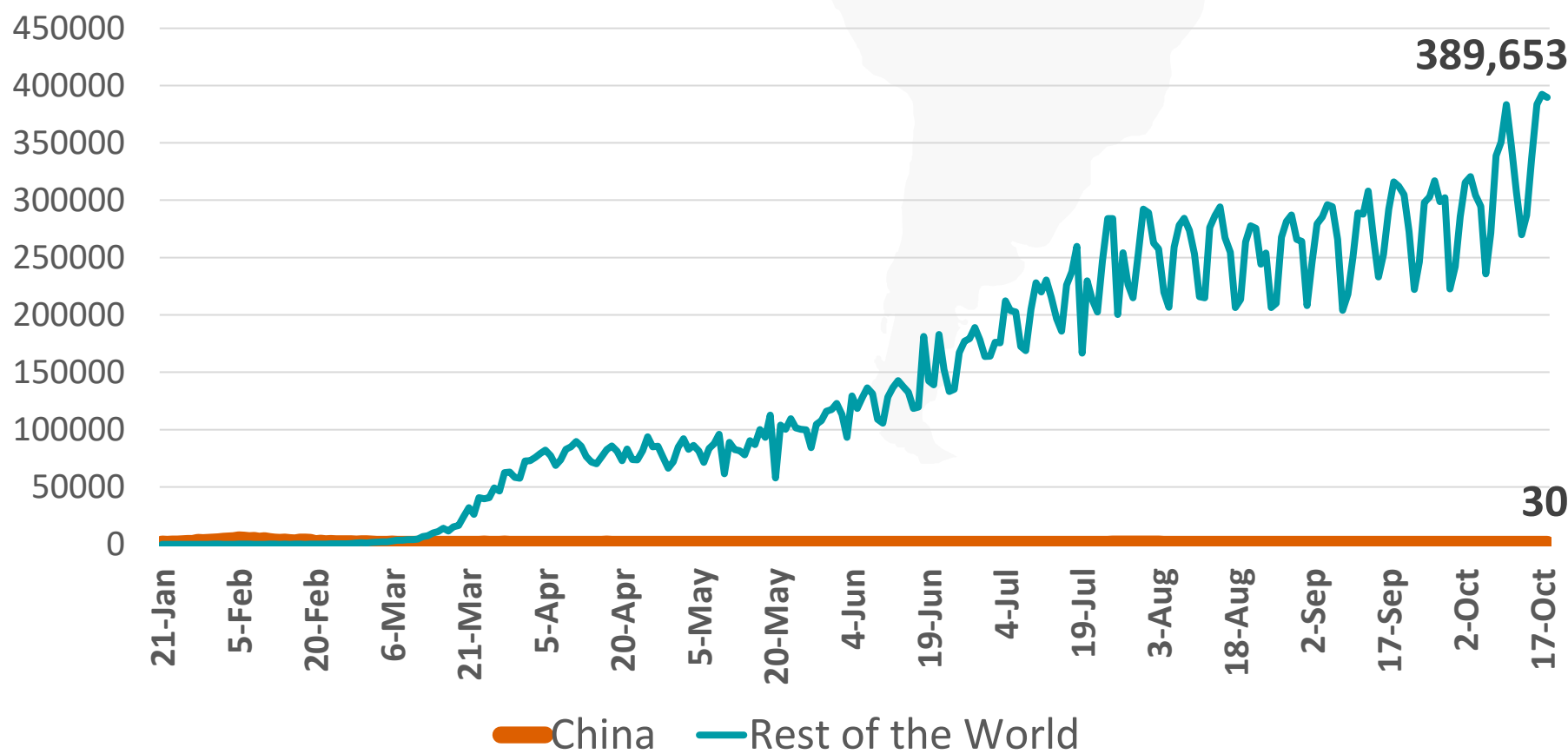


Figure 4: Global Daily New Deaths Due to COVID-19 (china and rest of the world)

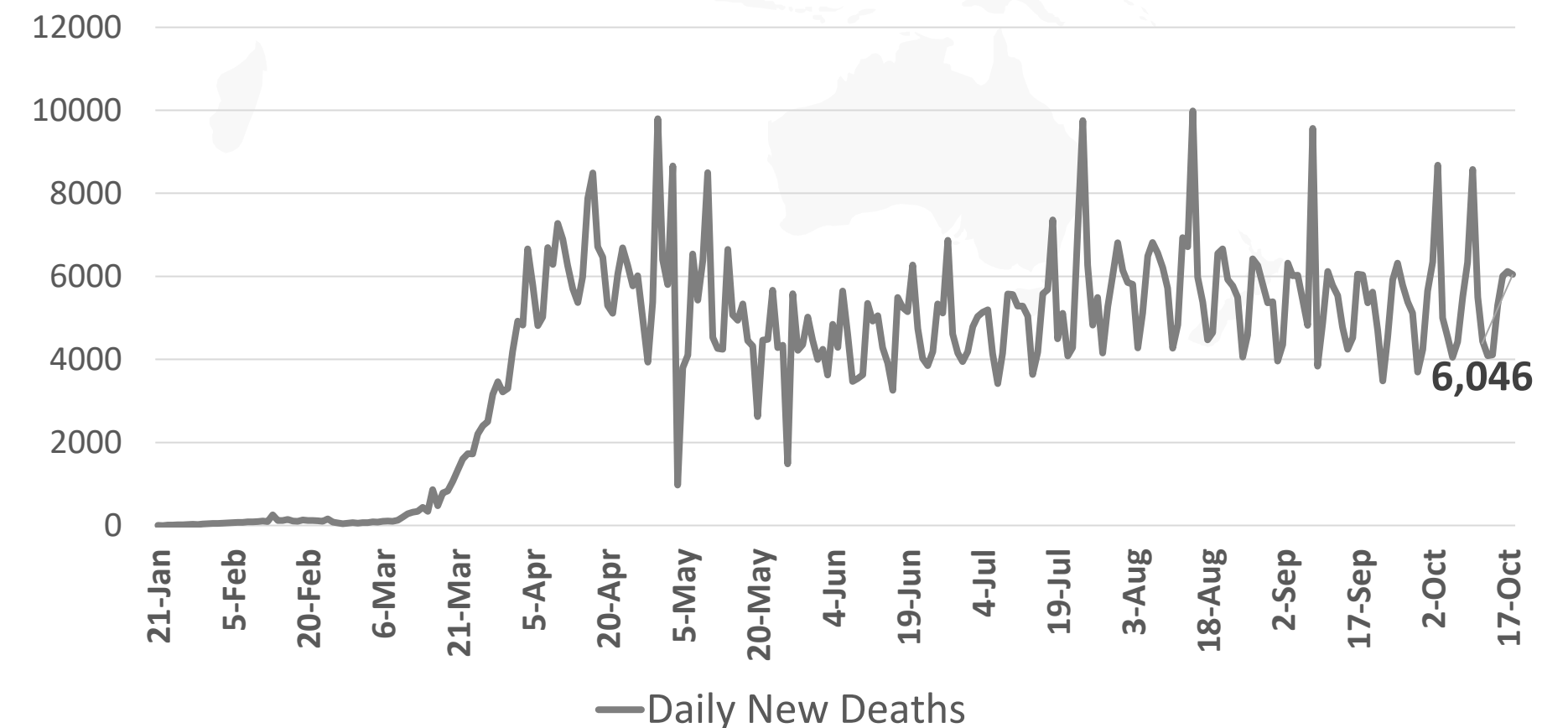
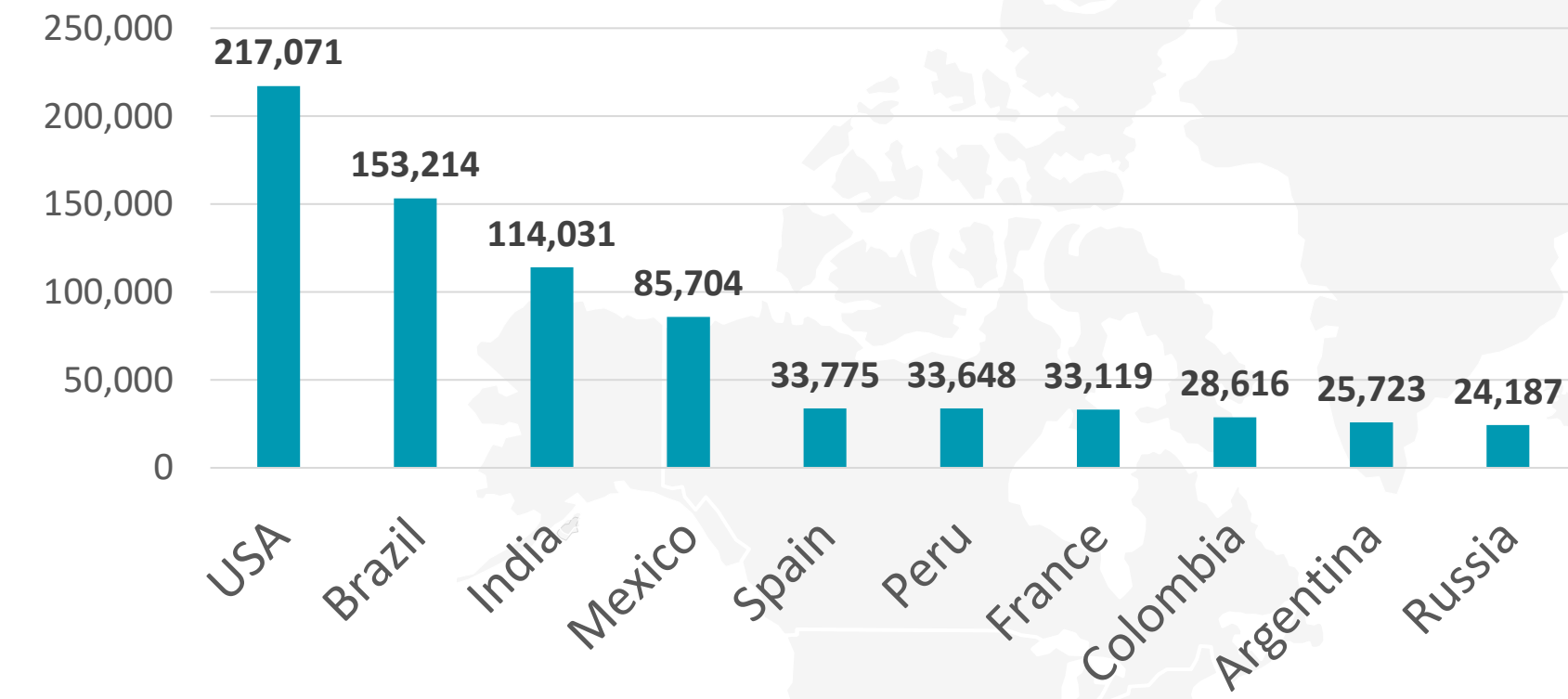
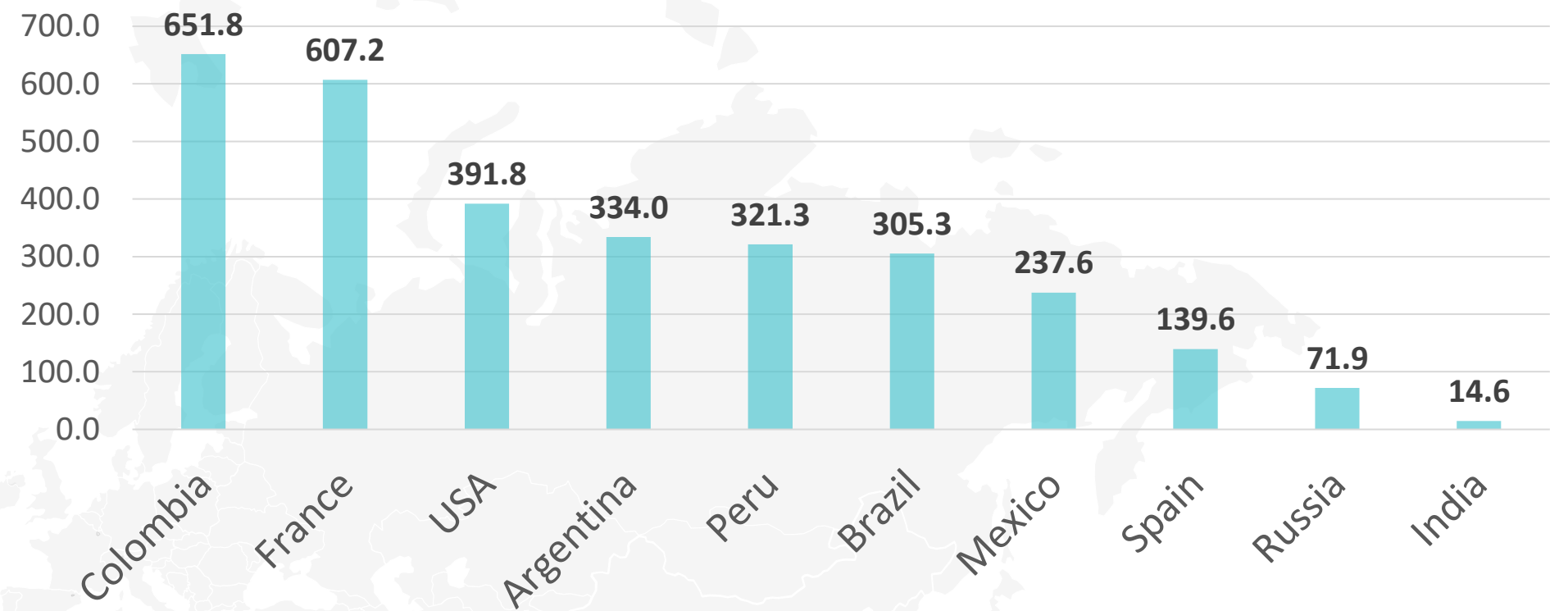


Figure 5: Top 10 Countries in the Total Number of Cases Due to COVID-19

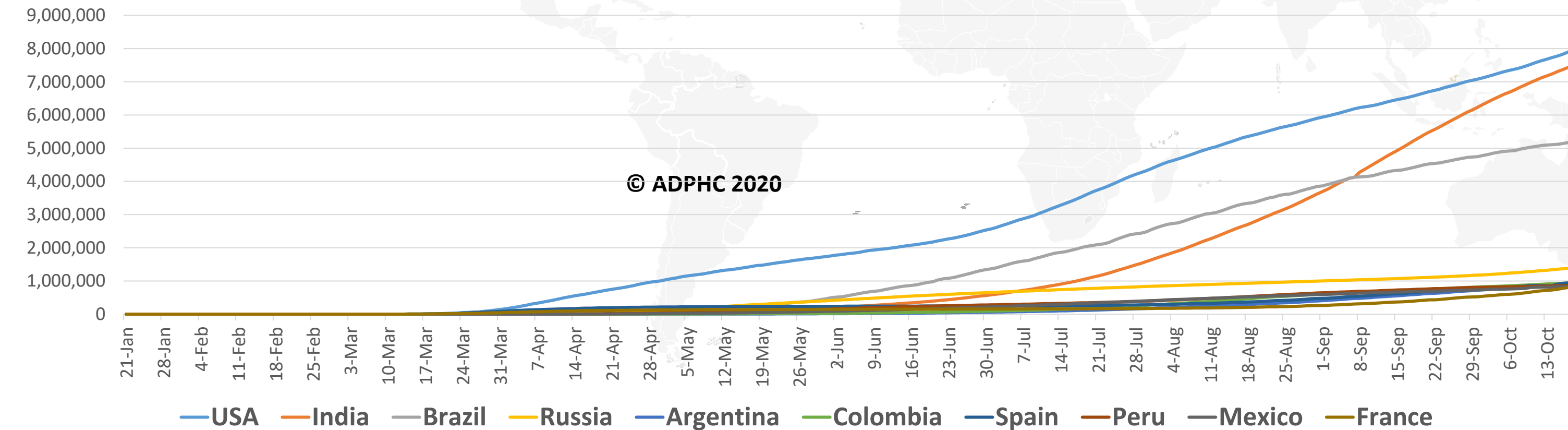
TOTAL DEATHS



DEATHS PER MILLION



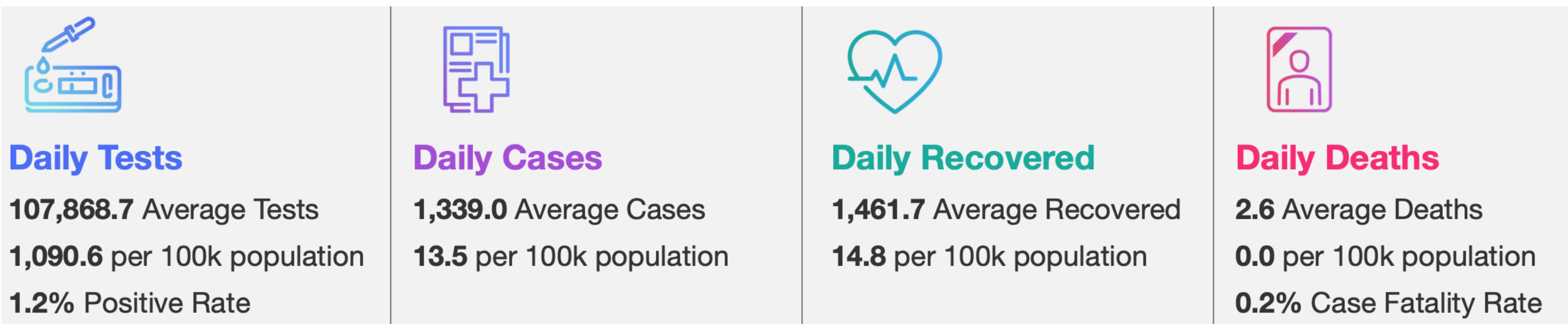
TOTAL INFECTED CASES



USA	7,966,729
India	7,494,551
Brazil	5,200,300
Russia	1,399,334
Argentina	965,609
Colombia	945,354
Spain	936,560
Peru	862,417
Mexico	841,661
France	838,145



Figure 6: COVID-19 Status in the UAE (Federal Competitiveness and Statistics Authority Dashboard)



TOTAL NUMBER OF INFECTED AND RECOVERED CASES DUE TO COVID-19 REPORTED BY THE UAE

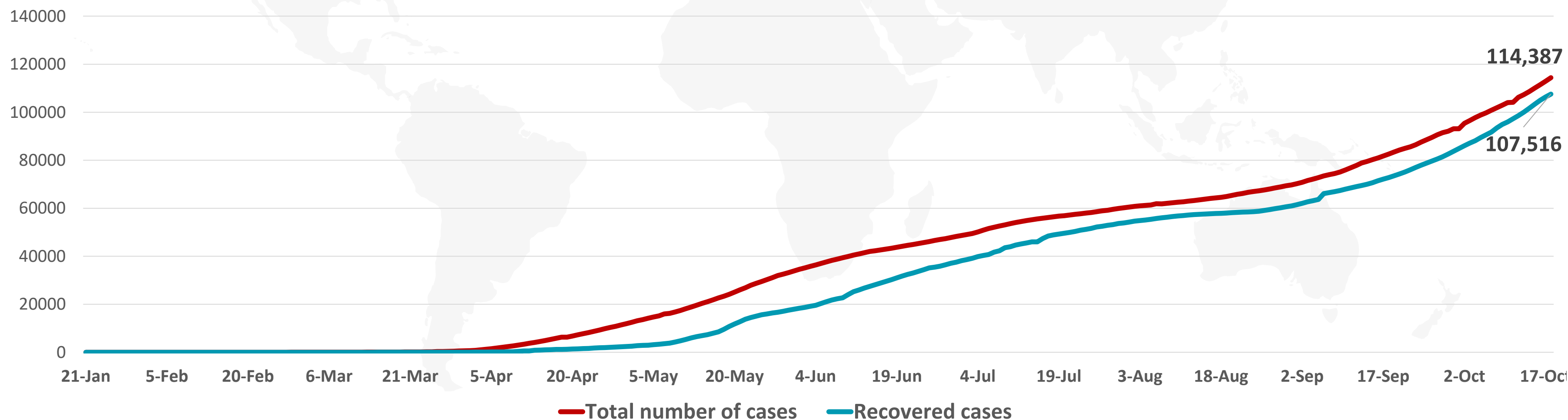
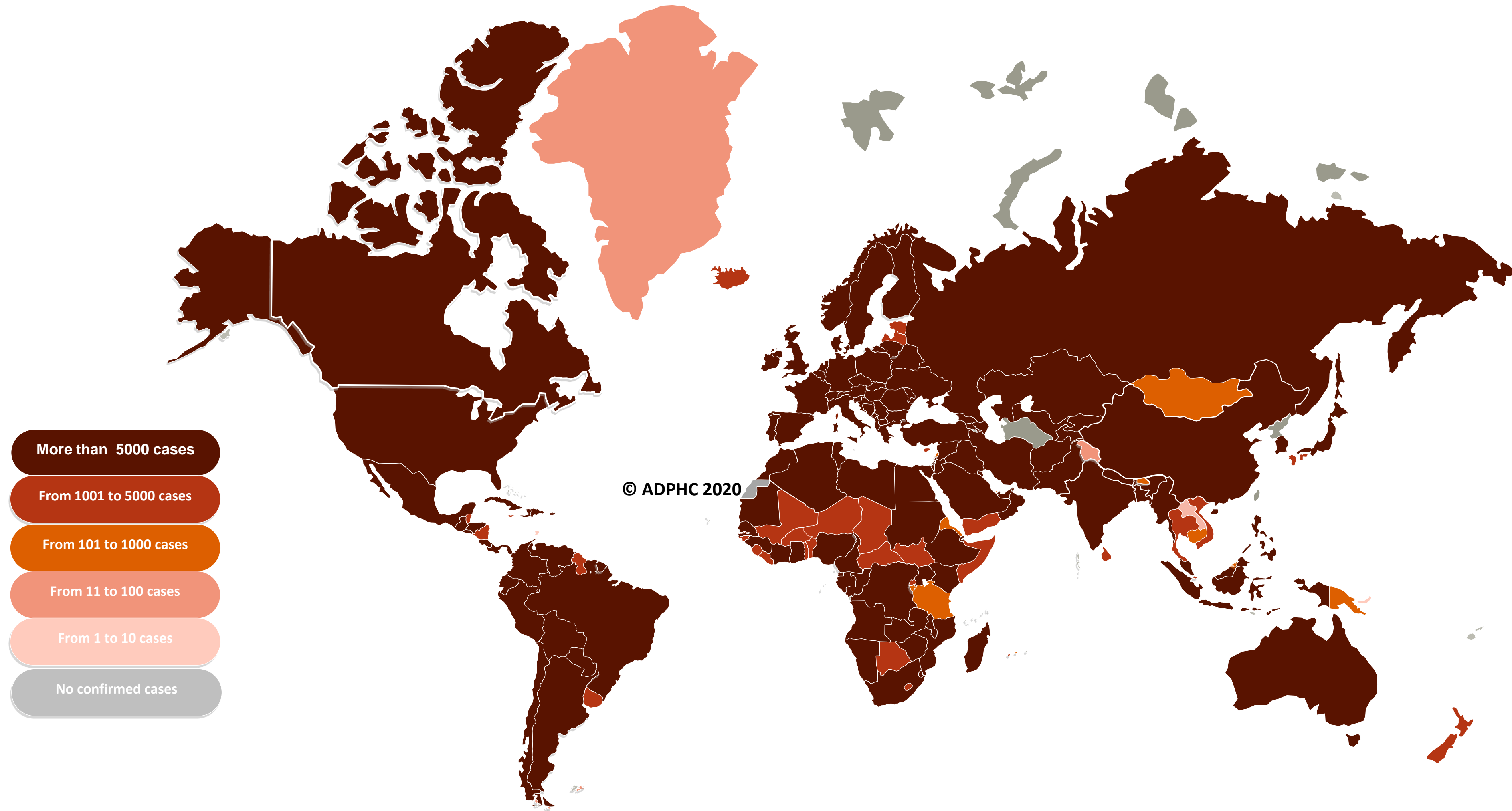


Figure 7A : Global Distribution of COVID-19 Cases



More than 5000 cases

From 1001 to 5000 cases

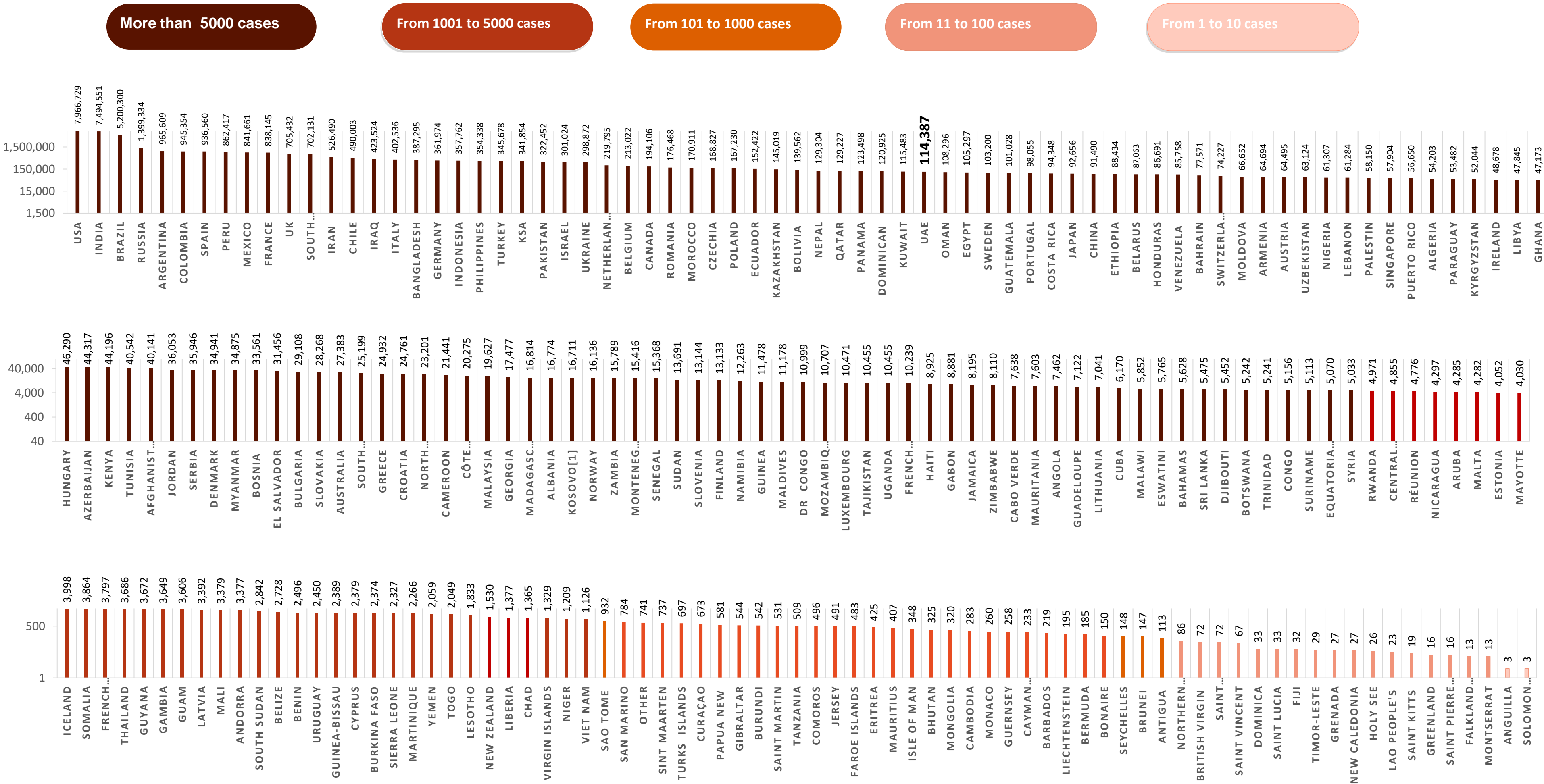
From 101 to 1000 cases

From 11 to 100 cases

From 1 to 10 cases

No confirmed cases

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



Other*: includes cases and deaths reported under the international conveyance(Diamond Princess)



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

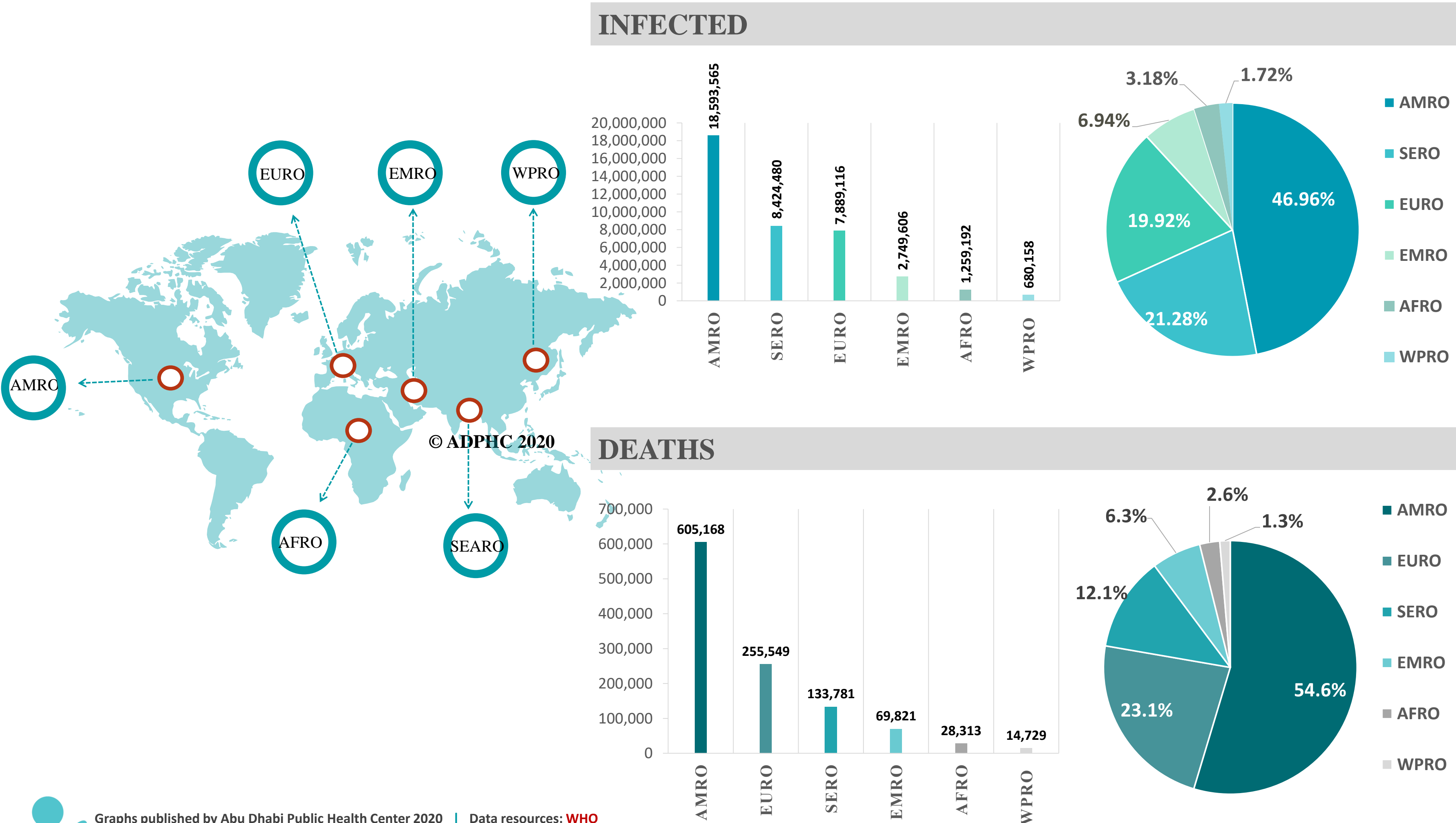
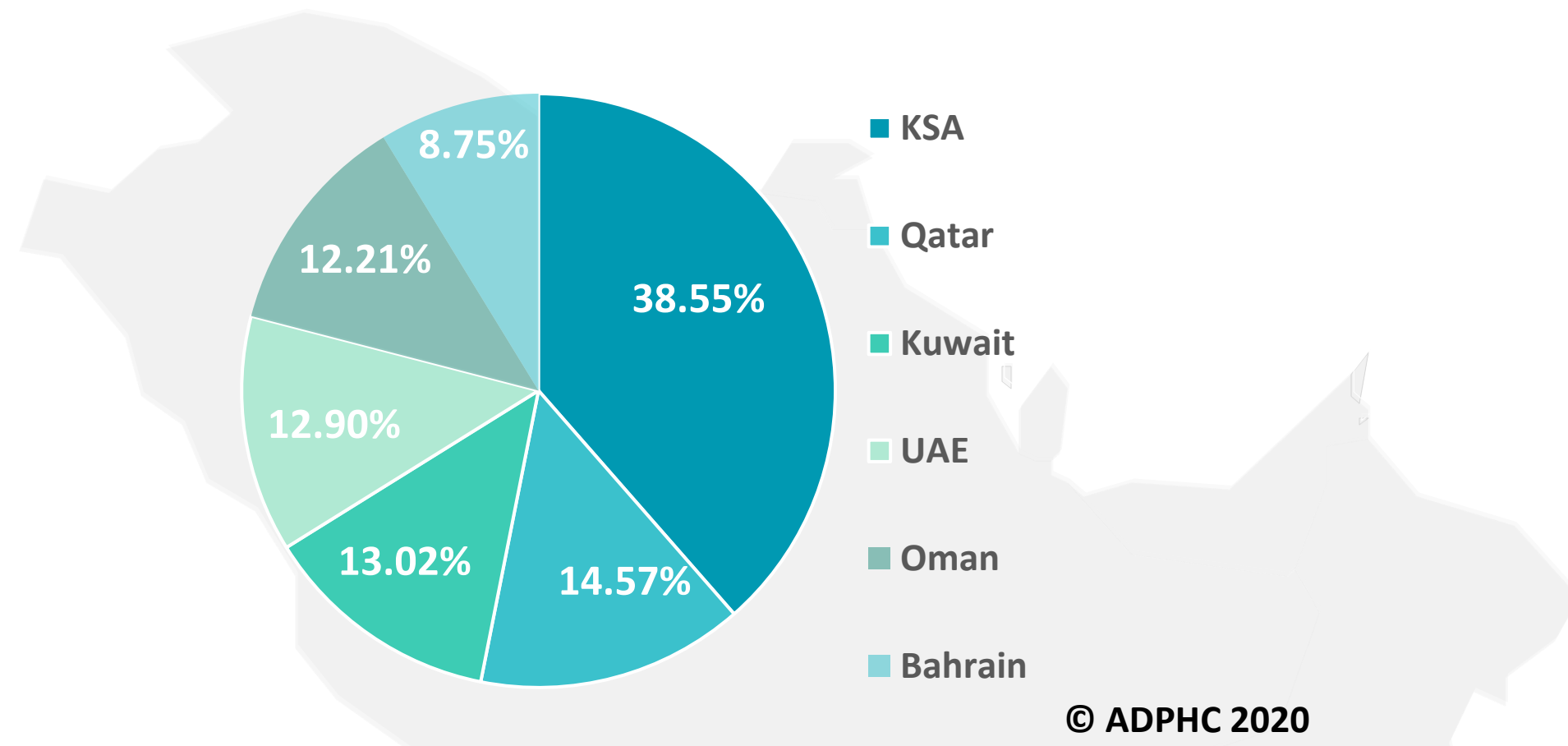
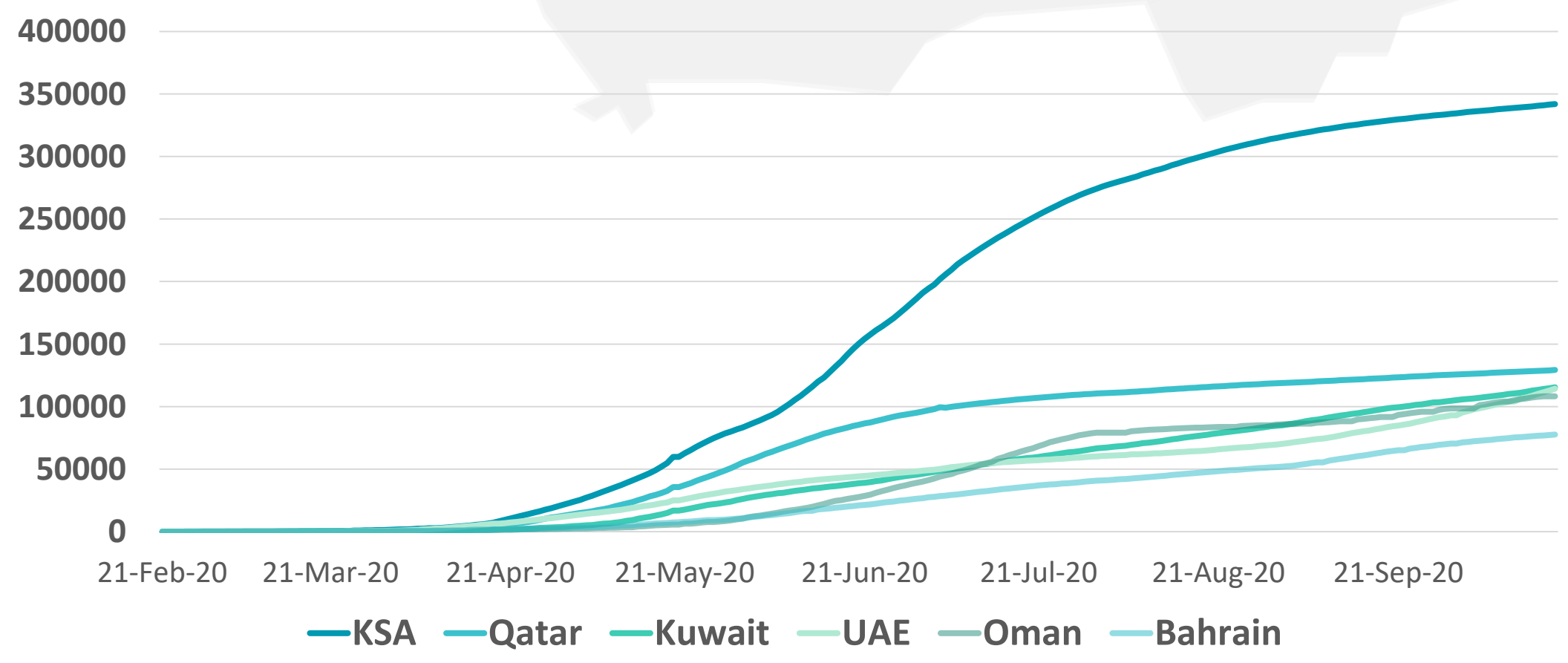
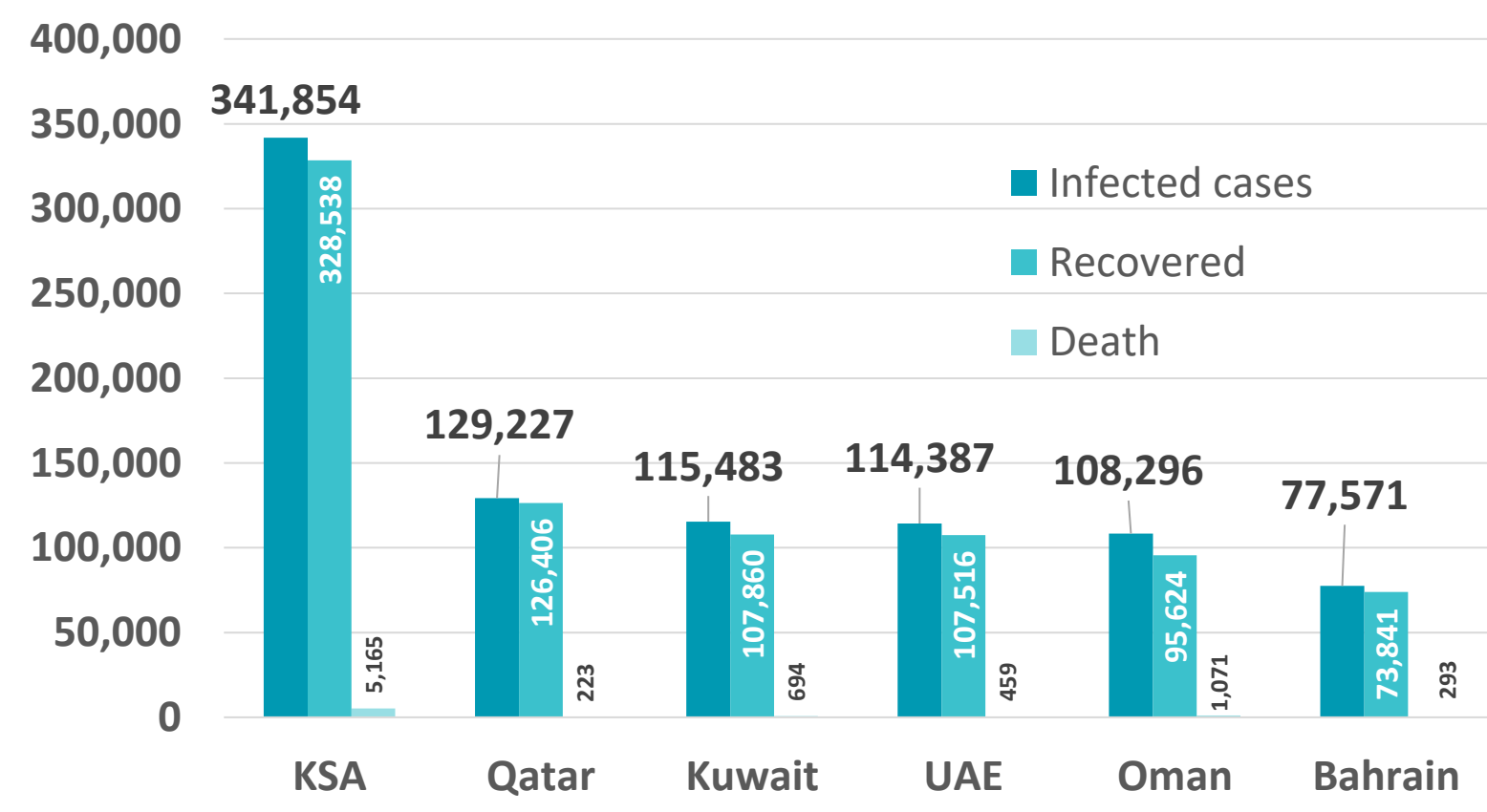


Figure 9: Comparative Analysis of the Distribution of COVID-19 Cases in GCC Countries

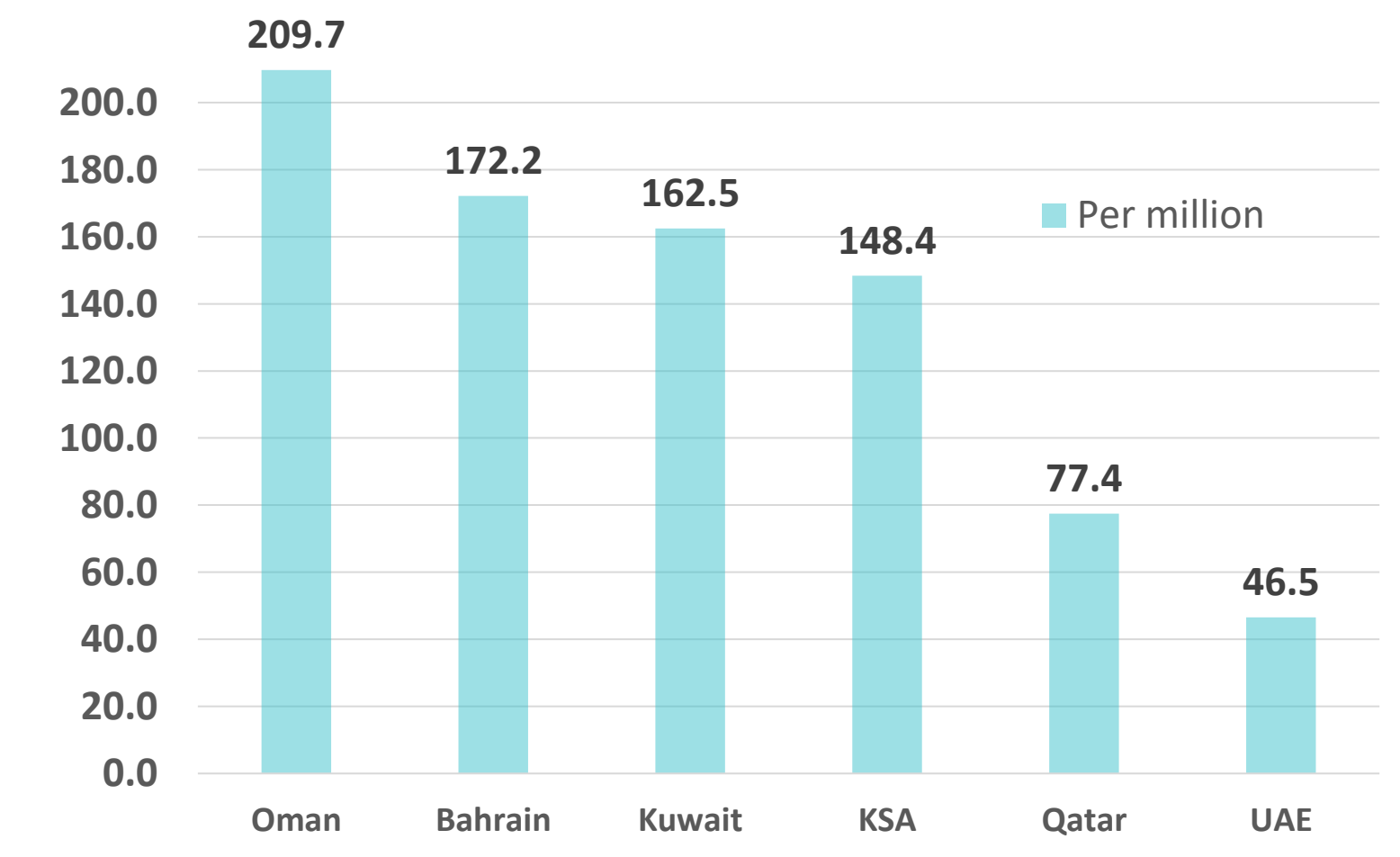
TOTAL NUMBER OF INFECTED CASES



TOTAL NUMBER OF INFECTED, RECOVERED AND DEATHS



DEATHS PER MILLION



Graphs published by Abu Dhabi Public Health Center 2020 | Data resources: [John Hopkins](#), [WHO](#)

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

UAE



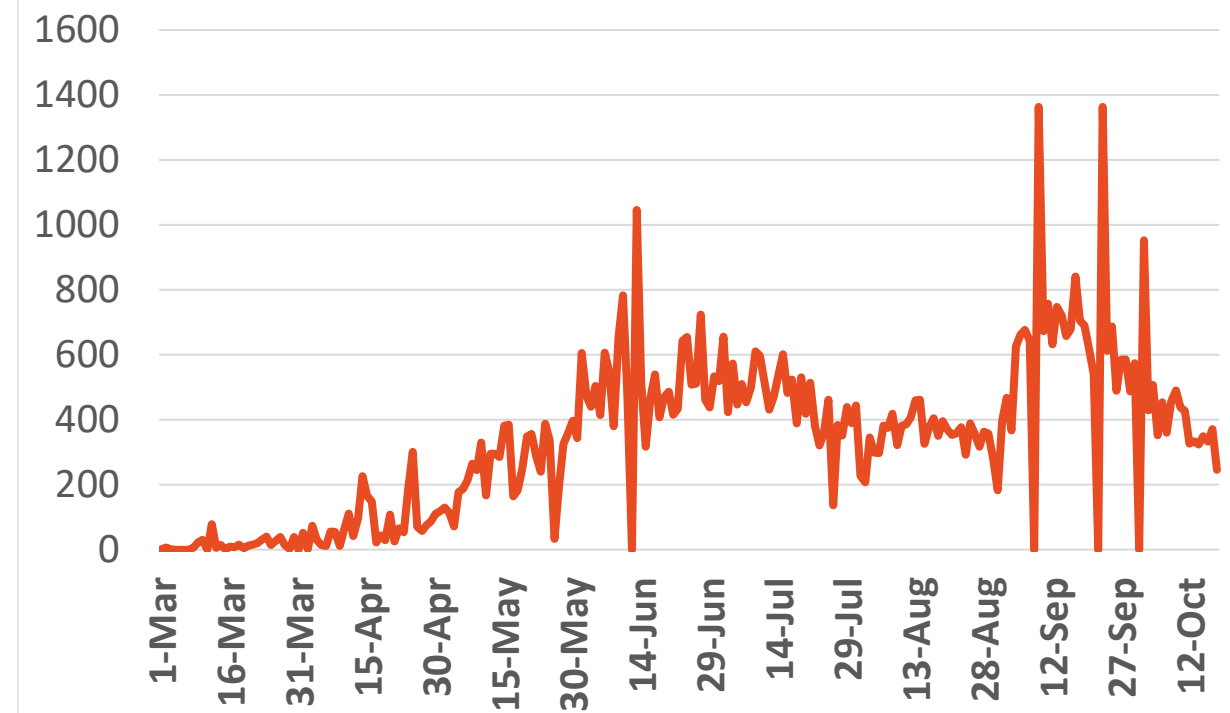
Source : National Emergency Crisis and Disaster Management Authority

KSA



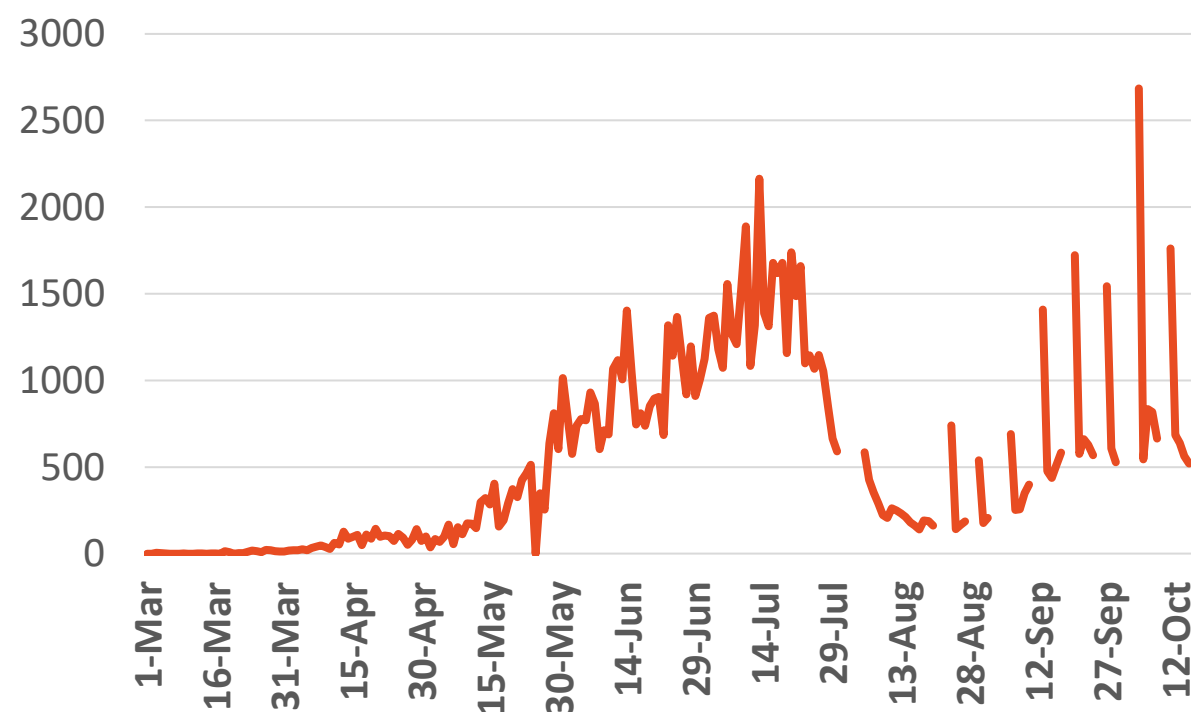
Source : KSA ministry of health

Bahrain



Source :WHO

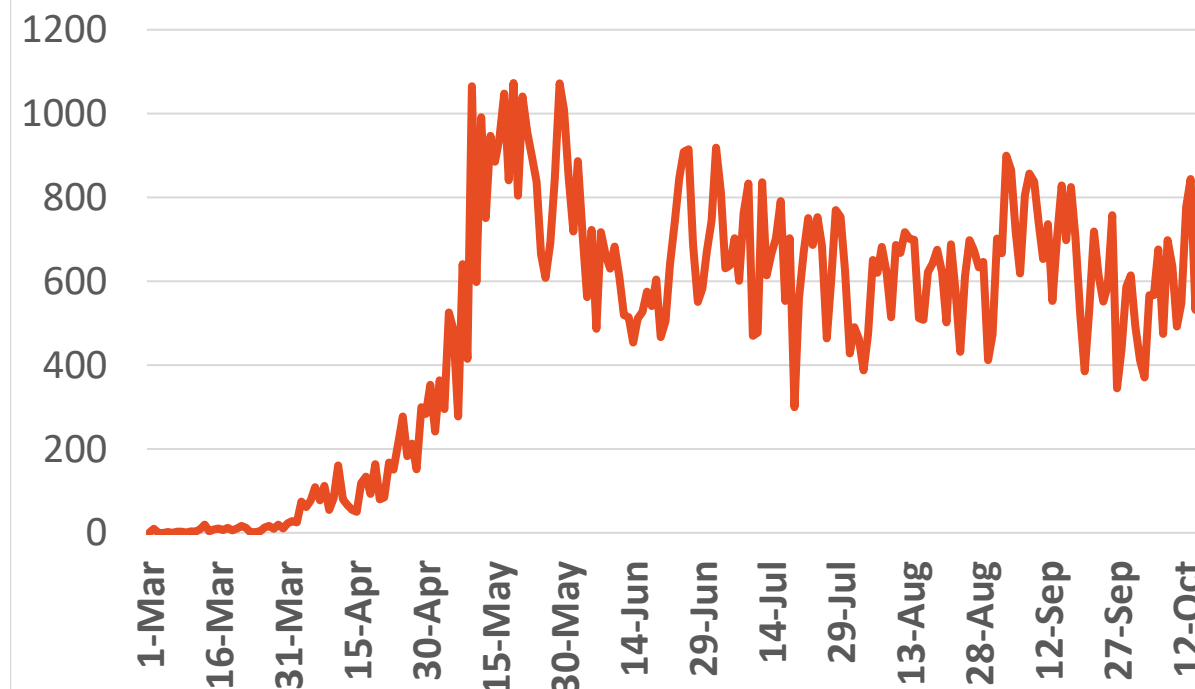
Oman



Source :Oman ministry of health

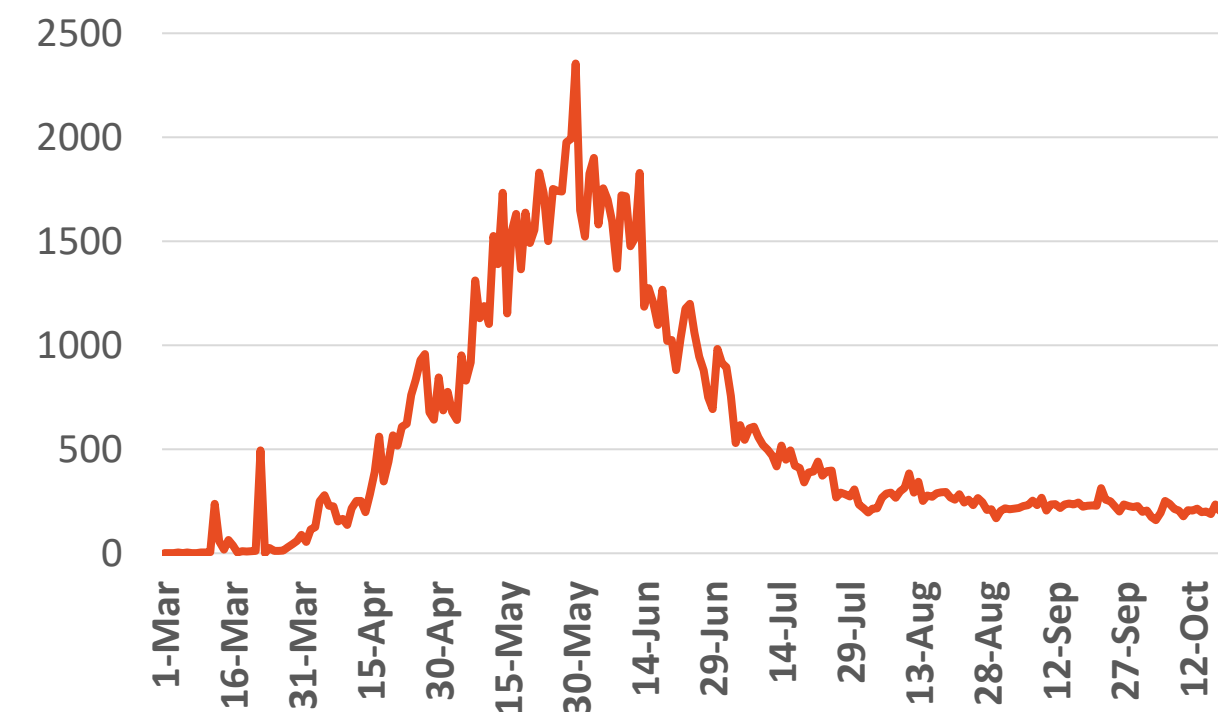
Kuwait

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Source : Kuwait ministry of health

Qatar



Source : Qatar ministry of health

*No announced statistic data from 31 July to 4 August, 21,23,28,30 August 2, 4, 5,11,12,18,19,25, 26,30 September,1,2,9,10,16 &17 October
*No announced statistic data on weekends and official holidays.



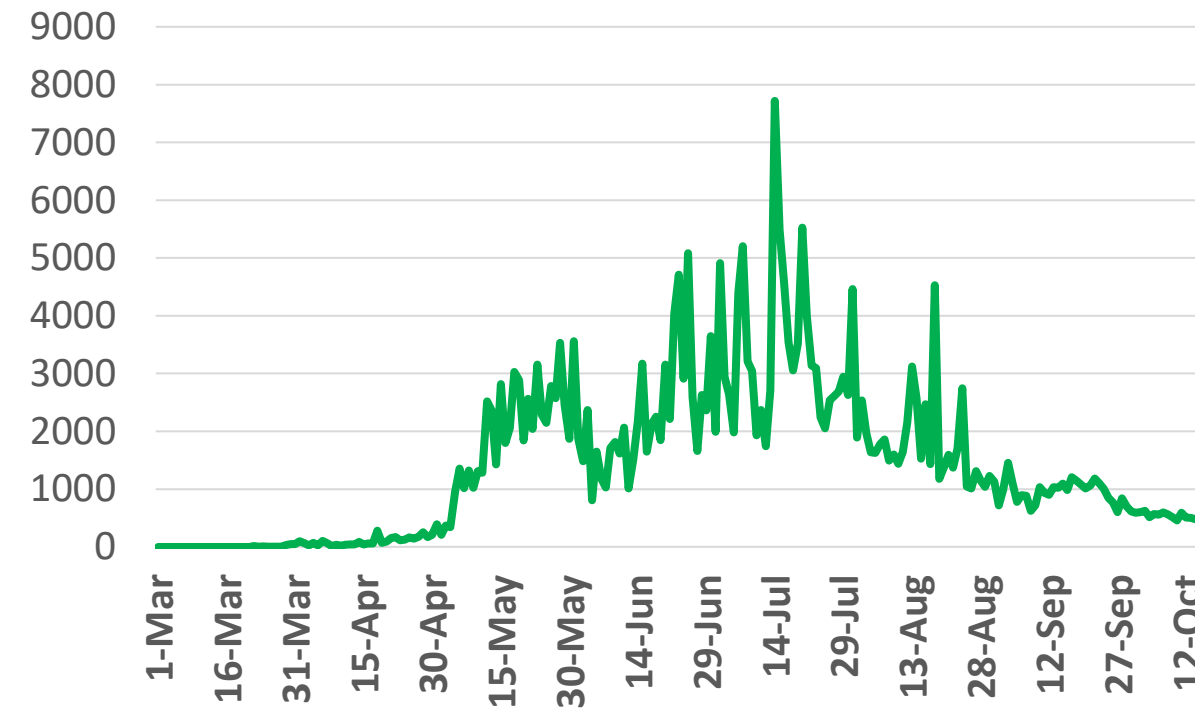
Figure 11: Comparative Analysis of the Distribution of COVID-19 Newly Recovered Cases in GCC Countries

UAE



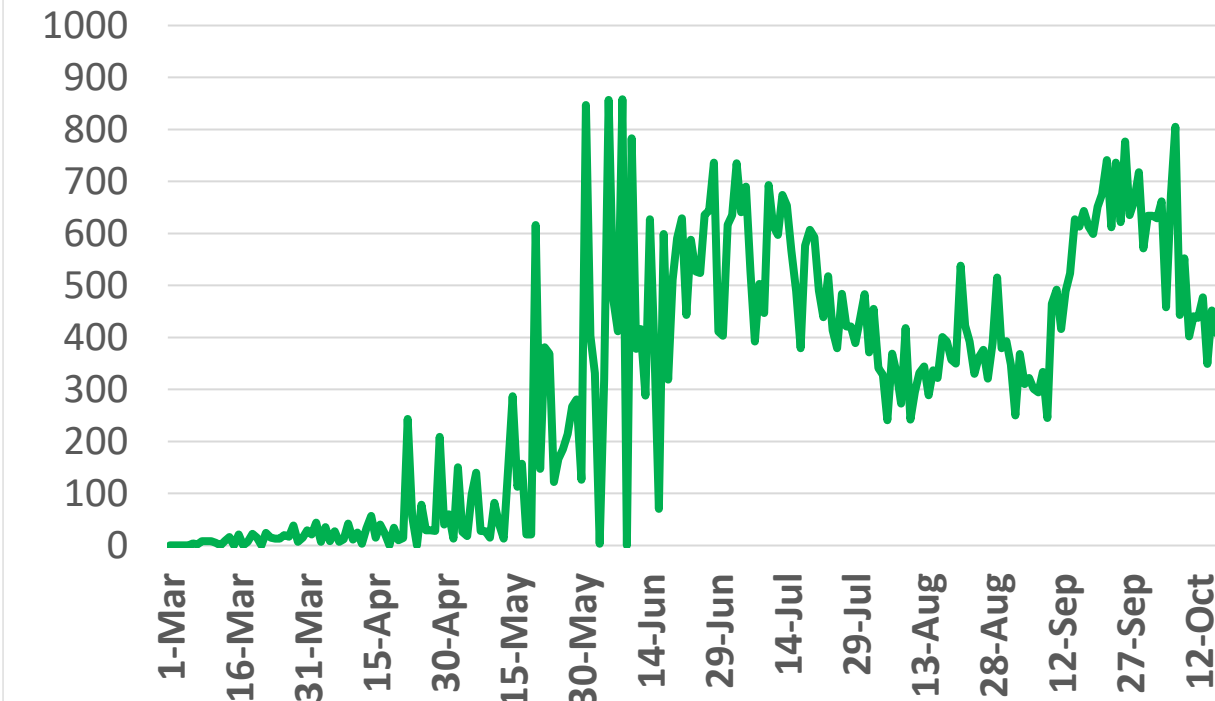
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KSA



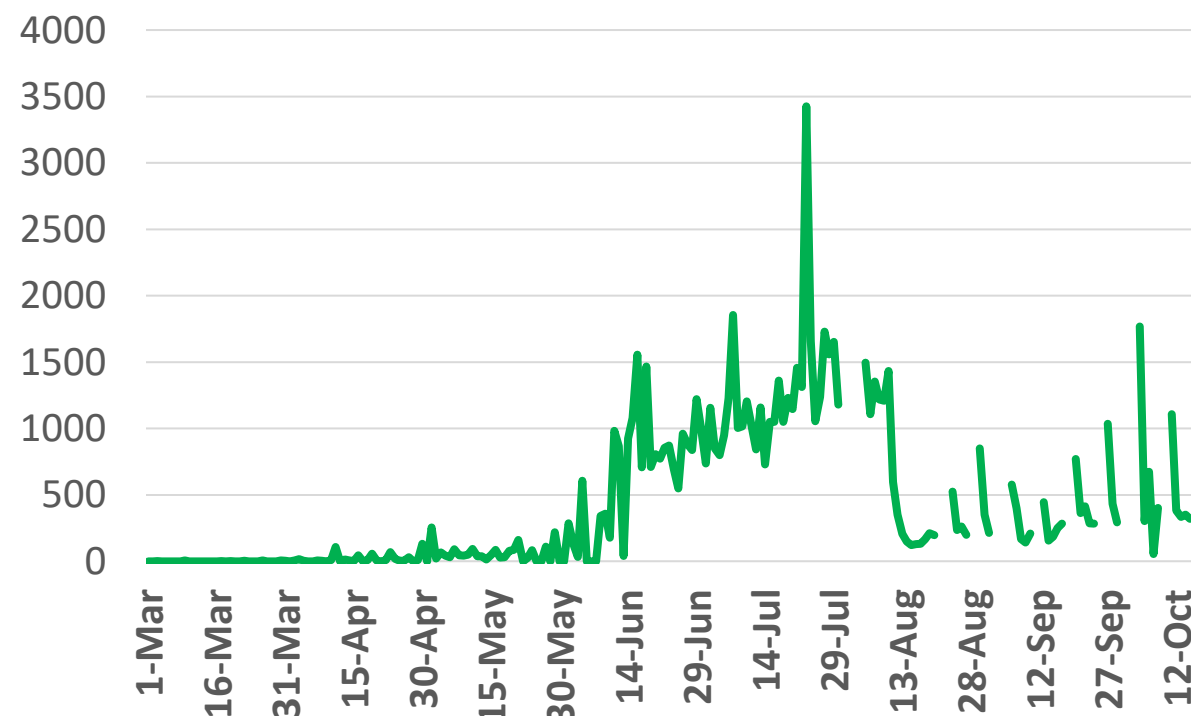
Source : KSA ministry of health

Bahrain



Source : Bahrain ministry of health

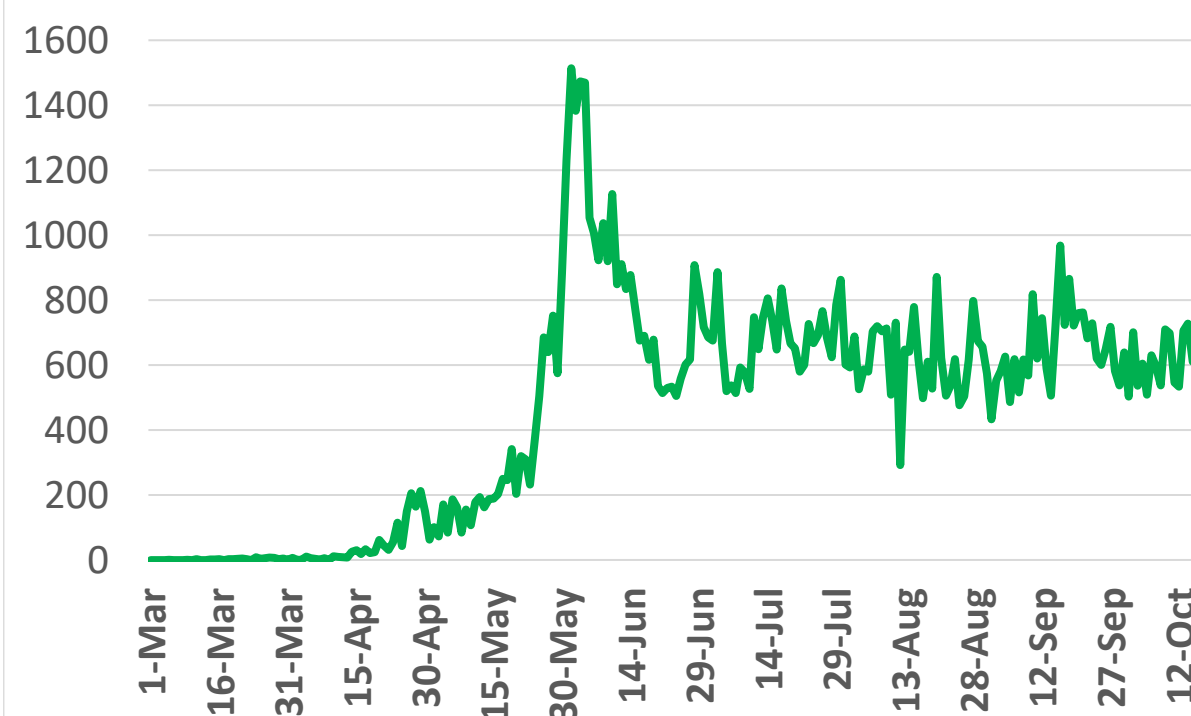
Oman



Source : Oman ministry of health

Kuwait

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Source : Kuwait ministry of health

Qatar



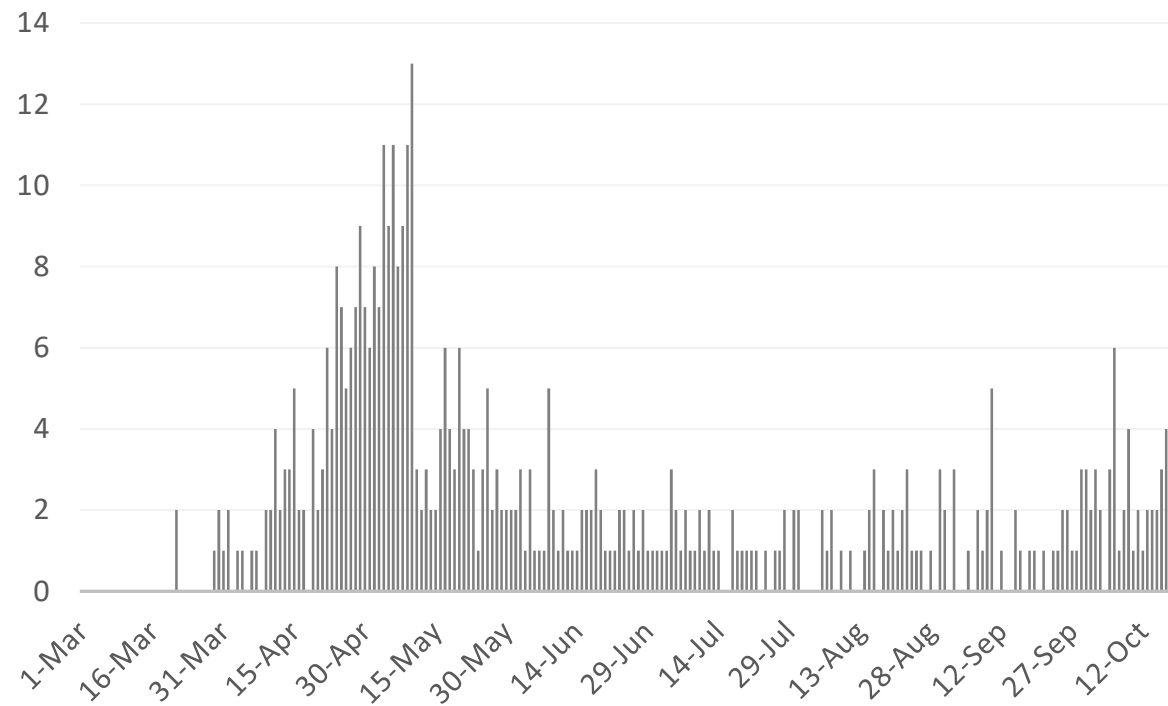
Source : Qatar ministry of health

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*No announced statistic data on weekends and official holidays.



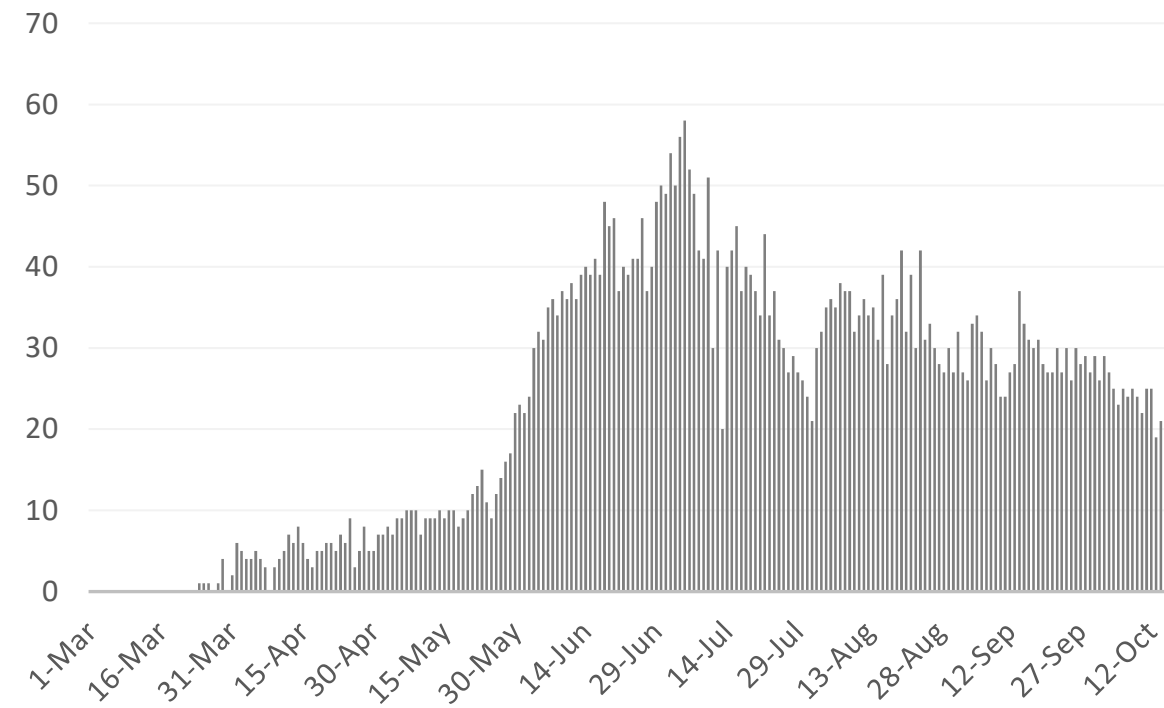
Figure 12: Comparative Analysis of the Distribution of COVID-19 New Death Cases in GCC Countries

UAE



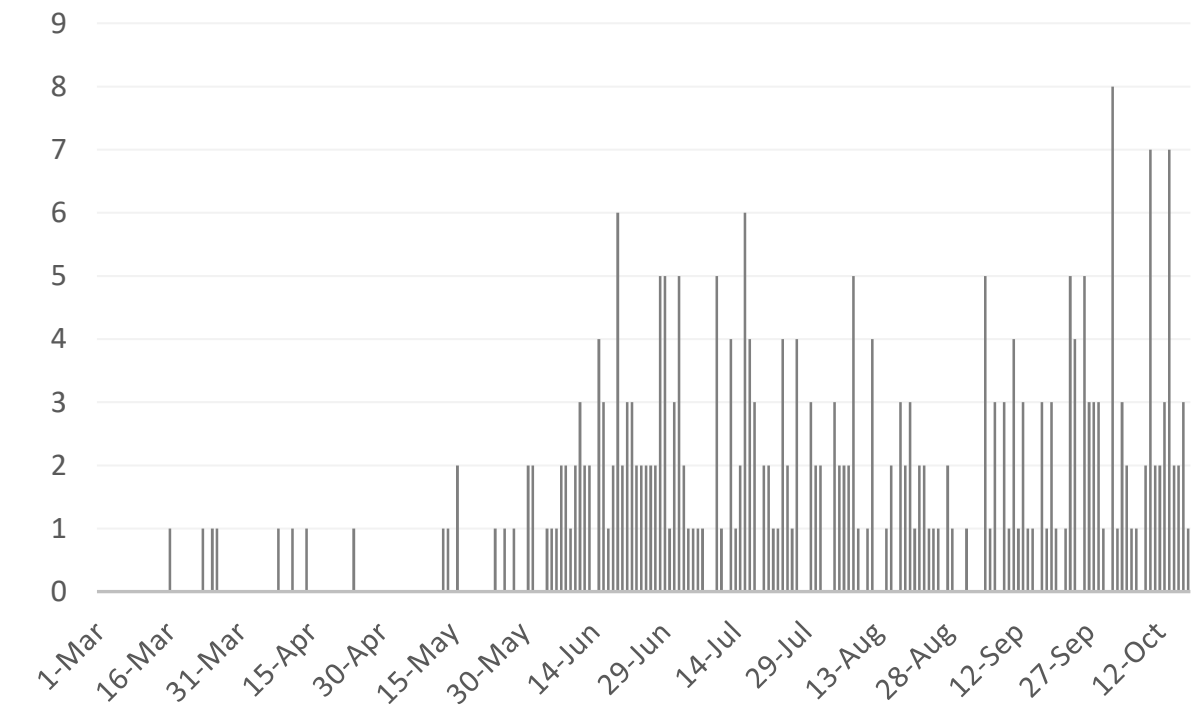
Source : National Emergency Crisis and Disaster Management Authority

KSA



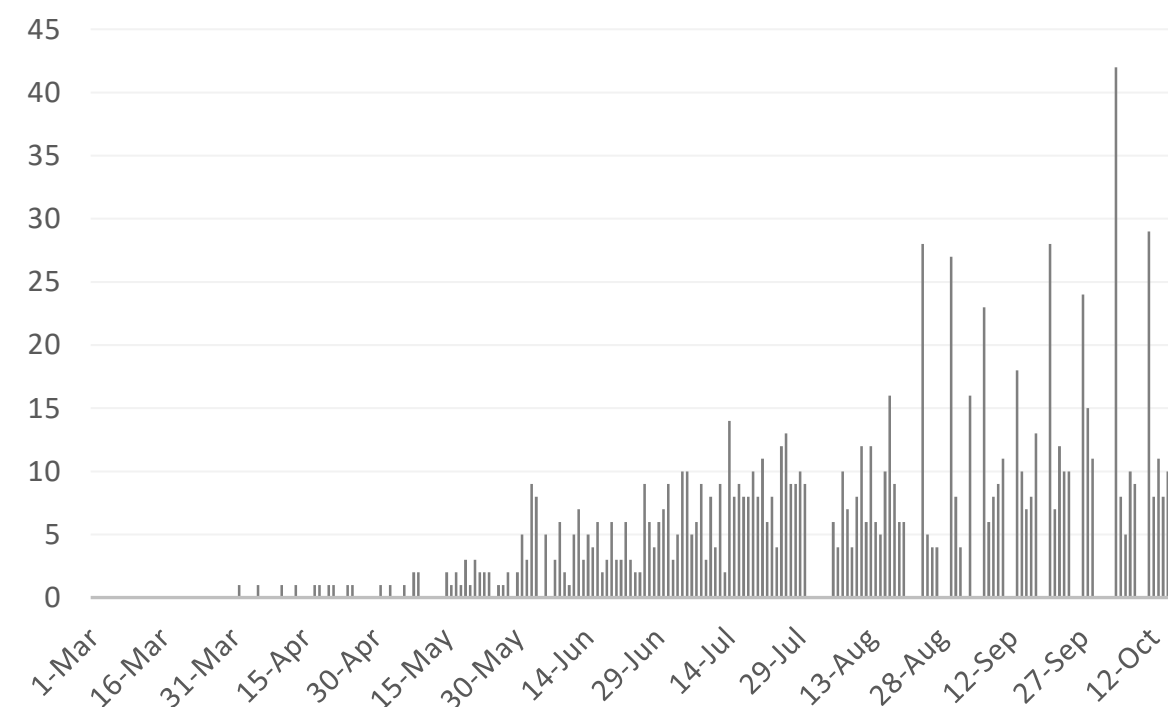
Source : KSA ministry of health

Bahrain



Source :WHO

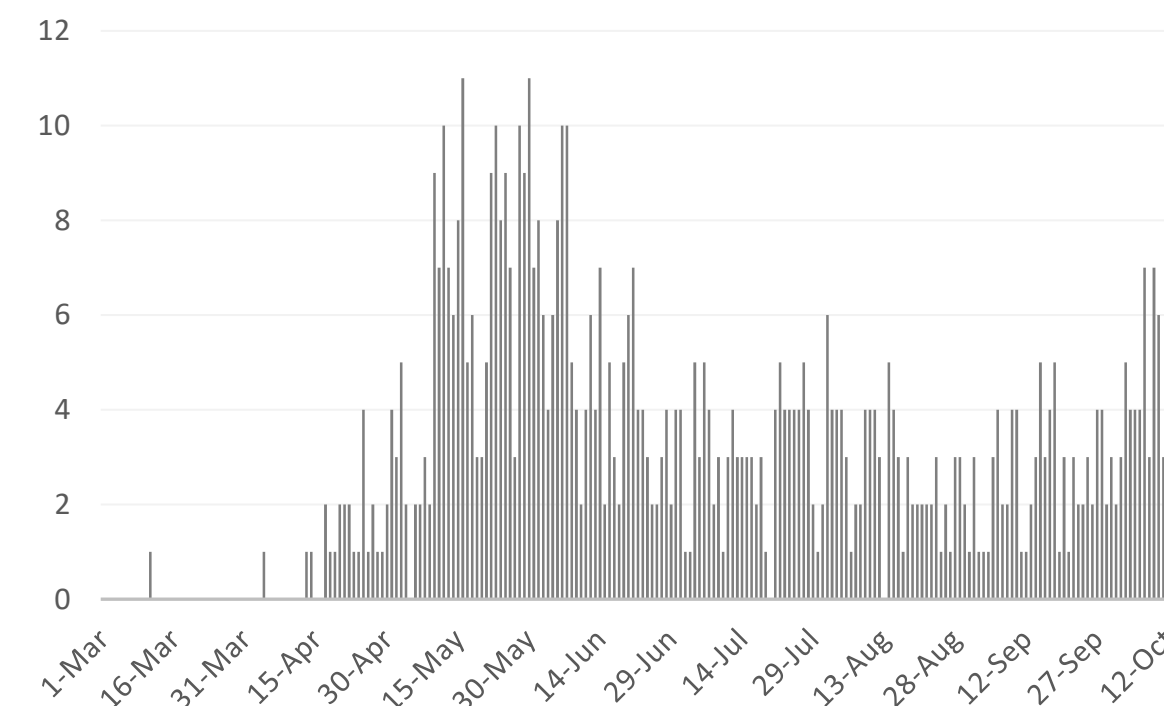
Oman



Source :Oman ministry of health

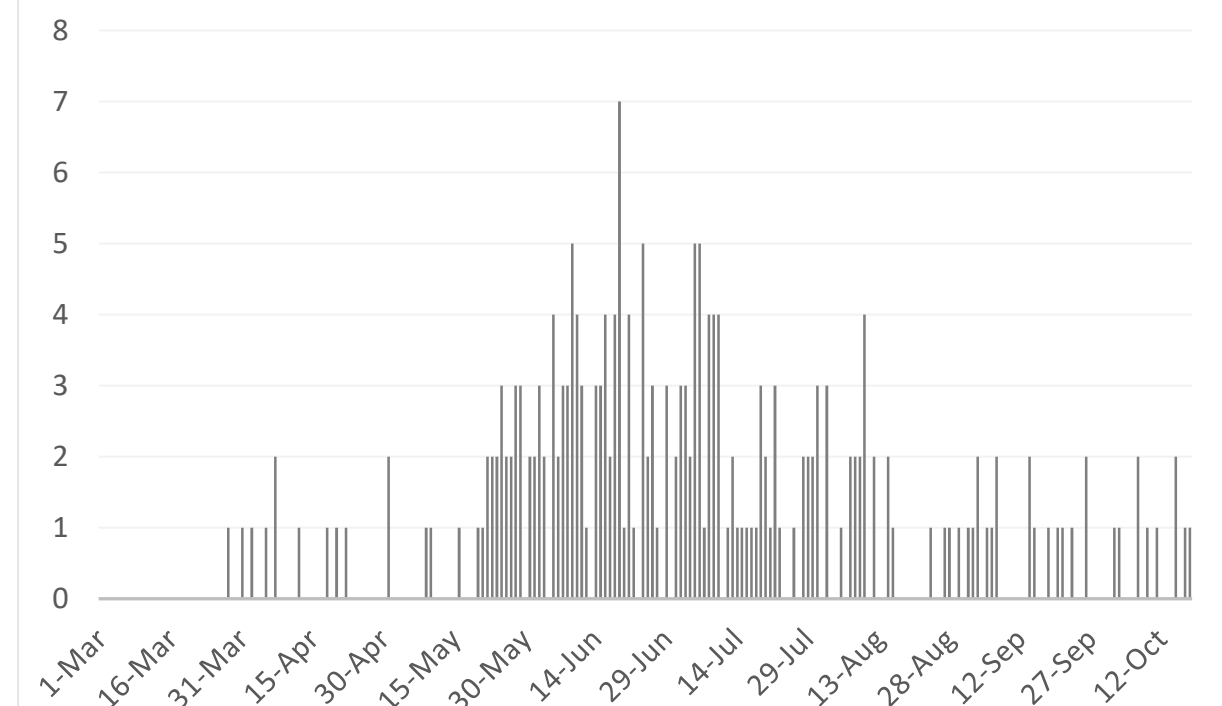
Kuwait

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Source : Kuwait ministry of health

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Source : Qatar ministry of health

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Article 1

Long-term Health Consequences of COVID-19

Published

October 05, 2020 [JAMA](#)

- Postacute COVID-19 syndrome is not just recognized in patients who had a serious illness that required hospitalization. According to the Centers for Disease Control and Prevention (CDC) study, 35% symptomatic respondents (n=274) reported that they did not return to their usual state of health ≥ 2 weeks after testing. Respondents aged ≥ 50 years with ≥ 3 chronic medical conditions were associated with not returning to usual health within 14-21 days after receiving a positive test result.
- The common symptoms after acute COVID-19 include fatigue, dyspnea, joint pain, and chest pain. Furthermore, specific organ dysfunction has been reported involving the heart (e.g. myocarditis, cardiac arrhythmia), lungs (e.g. interstitial thickening and evidence of fibrosis), and brain (e.g. headache, vertigo, encephalitis, seizures). These complications could be due to direct tissue invasion by the virus, profound inflammation and cytokine storm, related immune system damage, a hypercoagulable state described in association with severe COVID-19 or a combination of all of these factors.
- Diagnosis of COVID-19 and subsequent need for physical distancing have been associated with feelings of isolation and loneliness. COVID-19 related stigma can result in a sense of hopelessness. Prolonged malaise and exhaustion may leave patients with physical weakness and emotional disturbance. Furthermore, individuals who recover from COVID-19 may be at higher risk of depression, anxiety, posttraumatic stress disorder, and substance use disorder.
- It is essential that the care of these patients take a multidisciplinary approach with an integrated research agenda to allow the comprehensive study of long term health consequences of COVID-19 on multiple organs. Longitudinal observational studies and clinical trials will be necessary to explain the durability and depth of health consequences attributable to COVID-19 and compare with other severe illnesses.



Article 2

Published

Preserving and Promoting Competition in the Post– Coronavirus Disease 2019 Healthcare Delivery System

October 05, 2020 [JAMA](#)

- In the United States (US), COVID-19 pandemic has created financial pressure for health care organizations. Congress has sanctioned funds to support health care organizations during this crisis; however, these funds, along with other sources of federal relief, might be inadequate to prohibit insolvency for facilities with limited financial reserves. Pandemic associated financial instability could eventually accelerate market consolidation. Congress could target additional federal assistance to struggling health care organizations (e.g. rural hospitals). Ensuring a delivery system that is accessible and equipped to sustain an effective pandemic response could also have a lasting beneficial effect on the competitiveness of health care markets.
- Regarding promoting post-COVID-19 competition, two directions have been highlighted motivated by this pandemic –:
 - Payers could stop temporarily mandatory pay for performance programs (e.g. merit-based incentive payment system) that would eliminate administrative requirements and financial penalties that disadvantage some practices. Payers could redirect the resources necessary to administer these programs towards high priority objectives such as financial relief for health care organizations
 - Policy could focus on encouraging the entry of more efficient delivery models. Technology-enabled primary care groups can succeed under global budget contracts and compete with large health systems because the use of primary care services determines patient attribution in these contracts and influences an outsized proportion of spending.





PUBLIC HEALTH RESPONSE

Article 3

Lack of Safeguards in Response to Restrictive Public Health Measures

Published

October 08, 2020 [The LANCET](#)

- In the United Kingdom (UK), people from marginalized groups (e.g. black men) are more likely to be detained than more privileged groups (e.g. white men) under Mental Health Act (1983). Legal safeguards are in place for detention in health care settings through the tribunal and appeal process in the Mental Health Act. It will be unethical to detain individuals without a legal system in place. However, no similar legal or appeal system is in place for those detained under the public health measures sanctioned in response to COVID-19.
- During this pandemic, public health measures make it possible to place people at home in full detention with isolation and to place the entire communities in partial detention through the lockdown. It is crucial that proper legal safeguards are put in place to make sure such detentions are properly scrutinized. These should not be left for the government and the law enforcement agencies to exercise unchecked especially in view of their likely disproportionate impact to the marginalized groups.
- Safeguards need to be confirmed for those detained by the public health response to COVID-19. The measures that include external scrutiny from the community leaders might increase trust in the public health response and result in higher levels of compliance with the public health restrictions. Health care providers should ensure that interventions are properly balanced against people's rights to various freedoms and that proper legal safeguards are in place to prevent the exercising of unchecked power.



THANK YOU

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