

Coronavirus Disease 2019 (Covid-19) in Middle East: Data, Facts and Doubts

*Majid Rajabian¹, Maham Doagooyan²

¹Department of Biochemistry, Payame Noor University, Tehran, Iran.

²MSc, Medical Biotechnology, Medical Faculty, Mashhad University of Medical Sciences, Mashhad, Iran.

Abstract

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by a newly discovered coronavirus. A pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019. The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020. On 11 February 2020, WHO announced a name for the new coronavirus disease: COVID-19. The Middle East is one of the areas where the virus has become widespread and has caused many deaths. The severity of the COVID-19 disease varies from country to country, with the highest rates of infection in Iran, Turkey and Egypt. Compared to other countries involved, Iran has the most recovery, too. It is worth noting that these countries have been the target of unfair US sanctions for many years, and the import of drugs and medical equipment is associated with many problems. By maintaining personal hygiene and keeping a distance from anyone who is coughing or sneezing, also stopping the civil and foreign wars, lifting the sanctions and paying special attention to the health of all people, especially the weak and sensitive, there is hope that the disease may be defeated.

Key Words: Coronavirus disease 2019, Covid-19, Middle East.

*Please, cite this article as Rajabian M, Doagooyan M. Coronavirus Disease 2019 (Covid-19) in Middle East: Data, Facts and Doubts. Int J Pediatr 2020; 8(6): 11429-11434. DOI: **10.22038/ijp.2020.48778.3914**

***Corresponding Author:**

Dr. Majid Rajabian, Assistant Professor, Department of Biochemistry, Payame Noor University, Tehran, Iran.

Email: rajabian@yahoo.ca

Received date: Mar.30, 2020; Accepted date: Apr.12, 2020

1- INTRODUCTION

Coronaviruses are a large family of viruses. Some coronaviruses cause illness in humans and others cause illness in animals, such as bats, camels, and civets. Human coronaviruses generally cause mild illness, such as the common cold. Rarely do animal coronaviruses evolve to infect and spread among humans, causing severe diseases such as Severe Acute Respiratory Syndrome (SARS), which emerged in 2003, and Middle East Respiratory Syndrome (MERS), which emerged in 2012. The most recently discovered coronavirus causes coronavirus disease COVID-19. The Coronavirus disease 2019 is an infection caused by a virus called SARS-CoV-2 (1-3).

The virus first appeared in late 2019 in the city of Wuhan, Hubei province, China in December 2019, where it caused a large and ongoing outbreak and has since spread more widely in China. Regrettably, since then it has spread quickly and there are now cases around the world. The outbreak was declared a Public Health Emergency of International Concern on 30 January, 2020 (4). On 11 February, 2020, WHO announced a name for the new coronavirus disease: COVID-19. The COVID-19 virus is closely related to a bat coronavirus. Outbreaks of new coronavirus infections among people are always a public health concern. The situation is evolving rapidly.

Until the source of this virus is identified and controlled, there is a risk of reintroduction of the virus in the human population and the risk of new outbreaks like the ones we are currently experiencing (4-10). Globally, more than a million confirmed cases of COVID-19 have been reported. Updated case counts in English can be found on the World Health Organization, and European Centre for Disease Prevention and Control websites (11, 12). Since the first reports of cases

from Wuhan, a city in the Hubei Province of China, at the end of 2019, more than 80,000 COVID-19 cases have been reported in China, with the majority of those from Hubei and surrounding provinces. A joint World Health Organization (WHO)-China fact-finding mission estimated that the epidemic in China peaked between late January and early February 2020 (13), and the rate of new cases decreased substantially by early March. However, cases have been reported in all continents, except for Antarctica, and have been steadily rising around the world (4). The Middle East is one of the areas where the virus has become widespread and has caused many deaths. In this review, we aimed to have a brief review of Middle Eastern countries in terms of conflict with the virus.

2- MATERIALS AND METHODS

2-1. Method

In this review, the following databases were searched for relevant papers and reports: Scopus, EMBASE, Cochrane, Web of Science and Medline (via PubMed) with no language or time restrictions (until Apr 17, 2020) using the related keywords. **Table.1** presents the search query for Medline database. In addition, a manual search was also performed in the Google and Google Scholar search engines and the bibliographies of related articles. Two reviewers, who initially examined the abstracts of searched articles and then downloaded their full text to review carefully, chose the relevant studies independently. Finally, the articles that met the inclusion criteria were enrolled in the systematic review, and their used relevant references were reviewed to find further studies. The review also involved articles acquired through hand searching. The third reviewer judged any disagreement.

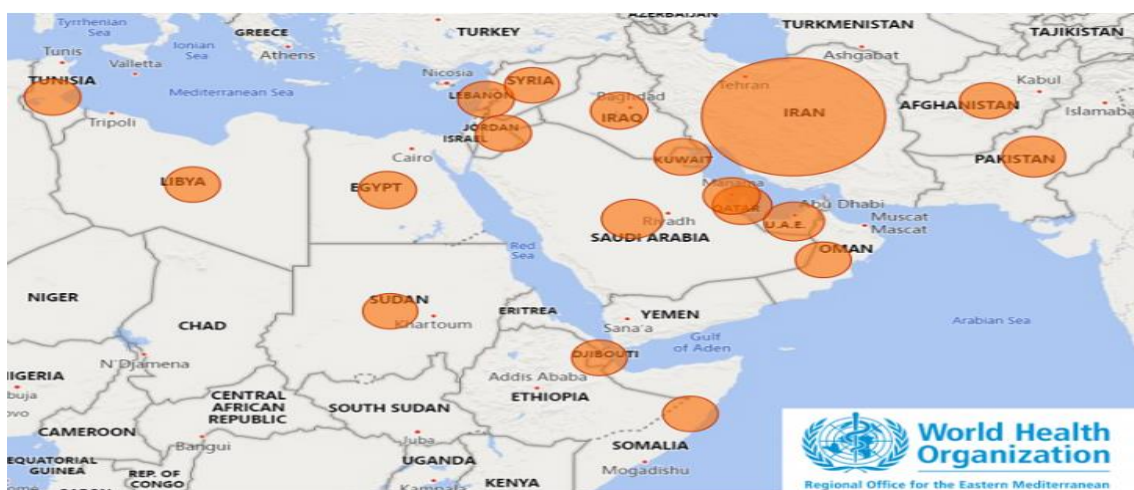
Table-1: Search query in PubMed.

Database	Query
Medline (via PubMed)	("middle east"[MeSH Terms] OR middle east[Text Word]) AND ("coronavirus"[MeSH Terms] OR Coronavirus[Text Word]) OR ("COVID-19"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "severe acute respiratory syndrome coronavirus 2"[All Fields] OR "2019-nCoV"[All Fields] OR "SARS-CoV-2"[All Fields] OR (("Wuhan"[All Fields] AND ("coronavirus"[MeSH Terms] OR "coronavirus"[All Fields])) AND 2020[All Fields])).

3- RESULTS

The Middle East is a region of the world that is in between Europe and Asia. This detail about the Middle East is what makes the region transcontinental. The Middle East is a region that spans the easternmost part of Europe and the westernmost part of Asia, and since the countries fall on two different continents, the Middle East is considered a transcontinental region, not a continent, country, or anything of the like. Most Middle Eastern countries (13 out of 18) are part of the Arab world. Several major religions have their origins in the Middle East, including Judaism, Christianity, and Islam. Arabs constitute the majority ethnic group in the region followed by Turks, Persians, Kurds, Azeris, Copts, Jews, Assyrians, Iraqi, Turkmen, and Greek Cypriots. The most populous countries in the region are Egypt, Iran, and Turkey, while Saudi Arabia is the largest Middle Eastern country by area, and Bahrain is the

smallest country (14-17). In general, the Middle East has a climate that leans towards being dry and relatively humid in nature. The Middle East comprises seventeen countries in total. These countries include Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, and Yemen. Globally, until 17 April 2020, there were 2,034,802 confirmed cases of COVID-19, including 135,163 deaths, reported to WHO. Authoritative global statistics show that all countries in the Middle East are somehow involved in coronavirus (**Table.2**). The severity of the disease varies from country to country, with the highest rates of infection in Iran, Turkey and Egypt. Compared to other countries involved, Iran has the most recovery; and this is while the country has been the target of unfair sanctions by the US government for many years and it is not even possible for the people of this country to import drugs and health items.



Source: WHO.

4- DISCUSSION

For the first time, in December 2019 in Wuhan, China, a new type of coronavirus was first identified as 2019-nCoV (18) after people became infected without a specific cause and the existing vaccines and treatments were not effective. However, as the number of victims of the Coronavirus virus crossed the 1,000 individuals mark, the World Health Organization chose the official name of COVID-19 for the disease. On January 30, 2020, the World Health Organization issued a statement declaring the outbreak of the new coronavirus an emergency public health emergency that posed a threat to the entire world, not just China (19). People can catch COVID-19 from others who have the virus. The disease can spread from person to person through small droplets from the nose or mouth which are spread when a person with COVID-19 coughs or exhales.

These droplets land on objects and surfaces around the person. Other people then catch COVID-19 by touching these objects or surfaces, then touching their eyes, nose or mouth. People can also catch COVID-19 if they breathe in droplets from a person with COVID-19 who coughs out or exhales droplets. This is why it is important to stay more than 1 meter (3 feet) away from a person who is sick (7-12). In this review, we aimed to have a brief review of Middle Eastern countries in terms of conflict with the virus. Results showed that Iran, Turkey and Egypt have the highest incidence of the disease. Also, the least affected countries are Syria, Yemen and Palestine. The results also showed that most of the recovery cases are related to Iran (4, 7, 8, 11-13). Regarding the results obtained, the following points are important:

1. The Middle East region has 17 countries, most of which have weak economies and very poor health care

facilities (Yemen, Syria, Iraq, Palestine, and Lebanon).

2. Some countries whose economies are based on tourists and pilgrims are more likely not to provide real statistics.

3. Some countries also try not to provide real statistics due to political considerations.

4. Some countries are unable to perform testing for all people due to lack of facilities and health personnel, and therefore the statistics provided are flawed.

5. In some countries, due to civil and foreign wars, COVID-19 disease is not their first priority.

6. Some countries have many specialists for prevention and treatment, but due to unfair US sanctions, it is not possible for medical equipment to enter their country, etc.

The prevalence of COVID-19 disease has severe consequences in Iran. The available evidence shows that the cowardly sanctions that were unilaterally imposed by the United States of America on this country in May 2019 have also negatively affected the health system. In many countries around the world, COVID-19 has created a significant economic burden that may have been unprecedented in recent decades. Despite the efforts of health officials, especially at the forefront of medical centers, it has been very effective in controlling and reducing the effects of the coronavirus epidemic, but Iran has borne a double burden due to cowardly sanctions; and to this day, many health care workers and innocent children and adults have lost their lives due to lack of medicine and medical equipment and many staff in treatment and care, along with the people in this difficult and exhausting path, have lost their lives. In the Middle East, some countries are involved in civil and foreign wars in addition to the prevalence of COVID-19

disease, which has exacerbated the situation and affected sensitive and vulnerable groups (such as children, women and the elderly). In places like Syria and Yemen, where healthcare infrastructure has been significantly damaged by ongoing conflict, mounting an effective response against COVID-19 poses an extremely difficult challenge. WHO has received reports of dozens of confirmed cases and two deaths in Syria due to COVID-19. A further spread of the virus could create a disaster for a country wracked by 10 years of war, particularly for internally displaced persons (IDP). Dangerously cramped conditions in multiple IDP camps, settlements, and places of detention increase the risk of infection. Five years into the conflict in Yemen, the country's healthcare system is on the brink of collapse and millions of Yemenis lack access to healthcare services.

Yemen has become home to diseases such as diphtheria and dengue, which can turn into serious health threats for a population that has been chronically malnourished for years. The results of the present study showed that most cases of recovery from COVID-19 disease are related to Iran. This may indicate that despite years of unfair sanctions by the United States and other countries, with the help of hardworking people as well as its experts and innovative youth, Iran has not given in to unilateral sanctions against Iran by the United States and its allies, and serving the people continues, even with the least facilities.

5- CONCLUSION

A pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019. The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020. There is no specific medicine to prevent or treat

coronavirus disease (COVID-19). All countries in the Middle East are somehow affected by COVID-19 disease. Iran, Turkey and Egypt have the highest rates of infection. On the other hand, Iran has the most cases of recovery from the disease. With personal hygiene and self-care, distance from sick people, attention to healthy eating, attention to the weak and susceptible people to disease, as well as the end of civil and foreign wars and the lifting of unilateral sanctions against countries involved in the fight against COVID-19, recovery and treatment can be improved and the defeat of COVID-19, is promising.

6- CONFLICT OF INTEREST: None.

7- REFERENCES

1. Zhu N, Zhang D, Wang W, Li X, Yang B, Song J, Zhao X., et al. A Novel Coronavirus from Patients with Pneumonia in China, 2019. *N Engl J Med.* 2020;382(8):727. Epub 2020 Jan 24.
2. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, et al. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *Lancet.* 2020;395(10224):565. Epub 2020 Jan 30.
3. Perlman S. Another Decade, Another Coronavirus. *N Engl J Med.* 2020;382(8):760. Epub 2020 Jan 24.
4. Coronavirus disease (COVID-19) Pandemic. World Health Organization. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
5. National Coronavirus Health Information Line. Available at: <https://www.health.gov.au/contacts/national-coronavirus-helpline>
6. NSW Health - Novel coronavirus. Available at: <https://www.health.nsw.gov.au/Infectious/covid-19/Pages/frequently-asked-questions.aspx>.

7. Coronavirus disease (COVID-19). UNICEF. Available at: <https://www.unicef.org/coronavirus/covid-19>
8. COVID-19 Response. United Nations. Available at: <https://www.un.org/en/coronavirus>.
9. Centers for Disease Control and Prevention. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>.
10. European Centre for Disease Prevention and Control. Available at: <https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases>.
11. Coronavirus disease (COVID-2019) situation reports. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>.
12. Situation update worldwide, as of 17 April 2020. European Centre for Disease Prevention and Control. Available at: <https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases>
13. World Health Organization Director-General's opening remarks at the media briefing on COVID-19 - 24 February 2020 <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-24-february-2020> (Accessed on February 26, 2020).
14. Cairo, Michael F. The Gulf: The Bush Presidencies and the Middle East Archived 2015-12-22 at the Wayback Machine University Press of Kentucky, 2012 ISBN 978-0-8131-3672-1 p xi.
15. Government Printing Office. History of the Office of the Secretary of Defense: The formative years, 1947–1950 Archived 2015-12-22 at the Wayback Machine ISBN 978-0-16-087640-0, p.177.
16. Kahana, Ephraim. Suwaed, Muhammad. Historical Dictionary of Middle Eastern Intelligence Archived 2015-12-23 at the Wayback Machine Scarecrow Press, 13 apr. 2009 ISBN 978-0-8108-6302-6, p. xxxi.
17. Shoup, John A. (2011-10-31). Ethnic Groups of Africa and the Middle East: An Encyclopedia. ISBN 978-1-59884-362-0. Archived from the original on 24 April 2016. Retrieved 26 May 2014.
18. Fox, Dan (2020-01-24). "What you need to know about the Wuhan coronavirus". Nature. doi:10.1038/d41586-020-00209-y. ISSN 0028-0836.
19. Times, The New York (2020-01-30). "Coronavirus Live Updates: WHO Declares a Global Health Emergency". ISSN 0362-4331. Retrieved, 2020-01-30.