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G20
SAUDI ARABIA 2020

Comparative Study on Supporting the Citizens and Residents Community During COVID-19 Pandemic in Brazil, Kingdom of Saudi Arabia, Turkey and United States of America.

This material had been prepared as a collaborative effort between National Health Center for Command and Control, Deputy of Public Health, Center of Command and Control, and Global Center for Mass Gathering.

Purpose

Novel coronavirus (COVID-19, later named as SARS-CoV-2) first reported in late 2019 in Wuhan City of China's Hubei province, where a cluster of 27 pneumonia cases (including seven severe cases) of unknown etiology, with a common link to Wuhan's Huanan Seafood Wholesale Market, a wholesale fish and live animal market was reported.

After the outbreak in China in December 2019, there were reports of confirmed cases identified in countries outside China, – Thailand, Japan and South Korea in January 2020 which later engulfed the rest of the world. This was a result of people travelling from these countries to abroad and serving as virus carriers, which led to widespread outbreak and was later declared pandemic by The World Health Organization (WHO)[1].

Since the start of pandemic, countries around the world have been seeking to develop preparedness strategies, response plans, and exchange experiences to learn more about the behavior of the virus, its ways of spreading mode of transmission and the best ways to prevent and treat it. In fact, the onset of COVID-19 did not only impact the citizen's health but also costed them their employment. This resulted in recession and economic burden due to limited cash flow in the market. As a result, many countries introduced economic packages, benefits to unemployed people, and tax rebates and payments' delay for businesses. These stimulus packages were announced to prevent the receding GDP from declining further. Recession did not only impact the nationals but was a misfortune in disguise for residents. Other than offering jobs to nationals and offering fiscal benefits, extra care needed to be given to the declining food supply during the current crisis.

This document aims to capture qualitative information on response and governmental actions in selected four G20 countries specifically regarding measures taken to protect and support its citizens and residents. Four countries were selected based on the availability of the information relevant to the research topic and these are: Brazil, Kingdom of Saudi Arabia, Turkey and the United States of America. The study includes some important decisions taken and the tasks accomplished, by these selected countries as a mean to summarize the most relevant and effective lessons learned in addressing the COVID-19 pandemic specifically around following main themes:

- Travel restrictions and support
- Healthcare provision
- Enabling measures
- Economic measures and employment assistance

In US, the National Center for Health Statistics (NCHS) collects death certificate data from vital statistics offices for all deaths occurring in the country. Overall, the deaths caused due to pneumonia, influenza, or COVID-19 (PIC) has reduced over the weeks. However, it is still above the epidemic threshold. According to an article published in May 2020, US Centers for Disease Control and Prevention (CDC) has estimated a 0.4 % fatality rate among the symptomatic cases considering that 35% of all infected cases remain asymptomatic, the overall infection fatality rate (IFR) would drop to 0.26%.[1,2]

Out of all the four countries, Turkey registered lowest fatality rates. The reason can be attributed to the country's strong health infrastructure coupled with large ICUs and high testing numbers which effectively tackled the crisis. According to an article published in April, Turkey's fatality rate stood at 2.3% when compared to US (5.3%), Spain (10.5%), Italy (13.2%), Germany (3.5%), UK (13.5%) and France (17.3%). Lately, Turkey has registered an increase in fatalities. This has happened due to increase in critical patients.[3,4]

As of August 2020, US and Brazil (and India) were leading countries in terms of fatalities. US and Brazil recorded 3% fatality rates. In Brazil, reopening of restaurants and shops have been cited as the reason for increasing cases.[5]

Of the four countries and in the world, KSA has one of the lowest coronavirus mortality rates and one of the lowest total number of critical cases among COVID-19 patients, as stated by its Minister of Health Dr. Tawfiq bin Fawzan al-Rabiah.[6]

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Brazil

Brazil is the fifth largest country in the world. While the country is the world's eighth largest economy, it is still working on rebuilding itself after the recession that occurred five years ago, when the economy contracted by almost 7%. Since then, Brazil has not been able to grow at the same pace it was used to during the decade before the recession hit.

Brazil reported the first case of COVID-19 on 26 February 2020. Afterward, the country has been continuously experiencing rapid increase in number of cases with the total number reaching to 4.55 million cases. Furthermore, number of cases in the country outnumbered the ICU beds, hospital staff, medical supplies leading to a high mortality rate. This created a huge burden on the medical facilities of the country.

In addition to this, the country witnessed uneven distribution of medical facilities amongst private and public hospitals, including ICU beds. Only a few states in Brazil had 1–3 Unified Health System *"Sistema Único de Saúde"* (SUS) ICU beds per 10,000 inhabitants, which is the number recommended by WHO. For instance, the medical services in São Gabriel da Cachoeira collapsed as the city had no ICUs and only seven respirators for treating COVID-19 patients at the start of pandemic. Also, many hospitals were operating above their capacity just in a month after the outbreak.

Further, as of May 2020, Brazil had 2.1 physicians per 1,000 people and nearly 9.8 nurses per 1,000 people. Also, the country had nearly 2.2 beds per 1,000 beds. As a result of this, new ICU beds were installed in various parts of the country, including Rio De Janeiro where an additional 100 ICU beds were installed. In addition to medical facilities, the government of Brazil also initiated various other measures to contain the spread and to reduce the overall impact.

1- Travel Restrictions and Support

a. Travel restrictions and limited visa services for foreign nationals[1,2,3]

In March 2020, all foreign nationals were restricted entry in Brazil, except the ones who were in international transit, foreign employees accredited to the Brazilian Government, foreign nationals whose entry was specifically authorized by the Brazilian Government in the public interest or for humanitarian reasons or the ones who were on a mission at the service of an international organization. Inbound travel from most of Europe and some Latin American and Asian countries was suspended until July.

The temporary restriction on the entry of foreign nationals was extended from August 26 for 30 days until September 25 and applied to foreign nationals entering Brazil by land or water.

After 22 June 2020, Brazil's immigration authorities resumed visa processing services, including approving work visas for certain purposes and pending visa renewals for applications that were submitted through the Ministry of Justice's platform, for applicants already in Brazil with a business visa waiting for approval.

Although the country restricted 90 percent of air travel from March, the virus spread from large urban centers to other regions of the country. Until mobility was reduced, on 16 March, Brazil was going through a period of celebration (The Carnival of Brazil) and social gatherings probably spread the first cases.

b. Social distancing measures[4]

The Brazilian government did not instantly urge citizens to comply with social distancing and other measures meant to slow the spread of COVID-19. On March 20,2020, the President issued an executive order to strip states of the authority to restrict people's movement to contain COVID-19, which was later revoked by the Supreme Court.

On 23 March,2020, a presidential order was issued to suspend deadlines for government to respond to public information requests including responding explicitly to its own policies to address the health emergency. Then, on 26 March a similar decree was issued to exempt churches and lottery houses from state and municipal health regulations by classifying them as essential services, thus allowing people to collect there. This was suspended by the federal court on the grounds of violating federal law. The federal court further barred the government from adopting measures against social distancing enacted by states.

c. Management of food supply[5]

The pandemic brought a renewed focus on the resilience of food supply chains, raising important questions about availability and accessibility of food in Brazil. Time-sensitive supply chains, like those providing fresh fruit and vegetables, suddenly began to look too long and too fragile. Policy advice has highlighted logistical solutions that could ensure future supply chains are more resilient and efficient.

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Brazil Cont..

Further, widespread job loss and rising prices during the crisis put pressure on people's ability to buy food. Even, if they substitute this with high-calorie, ultra-processed options, then rates of undernutrition and obesity would intensify and put pressure on already ailing health system. According to the 2020 Global Nutrition Report, Brazil is on track to miss all its nutrition targets for 2025.

2- Healthcare Provision

a. Shortage of hospitals and medical resources[6,7,8]

In Brazil, a "herd immunity" strategy was undertaken, however, the strategy did not come across as a success. Brazil faced shortages in hospitals and medical resources; ICUs in Sao Paulo were full, and the city was managing with make-shift hospitals. Many cities ran out of beds, medical equipment and testing kits, and their health system was near collapse. Nurses in Brazil were dying of COVID-19 faster than in any other country in the world, with almost 100 nurses dying from the disease per month.[9] In some cities, the situation was very poor, for instance in Campinas, there were long queues outside hospitals and patients were denied COVID tests.

The reason for such an impact on the healthcare system can be cited to lean measures, no disciplinary actions for people who flout the rules, no strictness for wearing masks, and no control on social gathering. Additionally, sub-ideal of coordination among the state and federal government, continuous promotion of unproven anti-malarial drug, hydroxychloroquine, despite warnings against its use to treat coronavirus by WHO further made the outbreak tough to contain.

b. Set up of field hospitals to alleviate pressure[10,11,12]

In Brazil, top football clubs handed over their stadiums for health authorities to turn them into field hospitals and clinics to fight the coronavirus pandemic. Since football matches in the country were suspended until further notice, more than half of the 20 teams in Brazil's Series A gave up their stadiums as authorities in densely populated Sao Paulo and Rio de Janeiro sought to expand hospital capacity to deal with the crisis. According to the Sao Paulo authorities, they installed 200 beds in a field hospital at the Pacaembu municipal stadium to relieve pressure on the city's hospitals, while two of the city's big clubs were also lending a hand. Sao Paulo, the worst hit city in the country, had four field hospitals in operation, including the first at a favela and provide 2,440 beds specifically to treat COVID-19 patients.

Outside Sao Paulo, Maracana in Rio de Janeiro which hosts Olympics and World Cup contests, among other stadiums were also getting converted to field hospitals.

3. Enabling Measures

a. Digital initiatives

The outbreak of the pandemic led to the increase in demand for digital transformation amongst all the sectors. Seeing this urge of technology advancements, Brazil not only implemented digital transformation for healthcare, retail, education and other sectors, but it also implemented the use of technology for containing the spread of the virus in the country. It introduced certain mobile applications to conduct surveillance, etc. The initiative introduced by the government for surveillance of lockdown rule is explained below.

b. Surveillance Technology[13]

In March 2020, the Government of Brazil introduced a system to conduct surveillance regarding lockdown rules for containing the spread of the virus. This system uses geolocation tracking to support actions related to lockdown. This technology has been developed by a Brazilian start-up In Loco. This technology is primarily used by the companies from sectors such as retail, to securely target and engage with users without the need to share personal information. In Recife, the city tracked nearly 700,000 smartphones for identifying the regions where the lockdown rules were properly followed. Through this technology, the government monitored neighbourhoods with collective data in order to know whether the lockdown is working. Further, it helped in checking through several measures, including cars with loudspeakers, notifications via smartphone and other actions related to communication with the public.

4. Economic measures and employment assistance[14,15,16]

To support the economy, fiscal measures were announced by the Brazilian federal, state and municipal governments. In March 2020, the Minister of Economy, Paulo Guedes, announced the economic stimulus package, closed by the Ministry of Economy, Public Banks and the Central Bank will be USD 150 billion (BRL 750 billion), to face the economic impact cause by COVID-19. The funds include following measures:

- loosening of the fiscal target above the previously forecasted deficit of US$ 24.8 billion;

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Brazil Cont..

- support for the most vulnerable population, with anticipation of the 13th salary (US$ 9.2 billion) and salary allowance (USD 2.5 billion), transfer of PIS (Programa de Integração Social) / PASEP (Programa de Formação do Patrimônio do Servidor Público) to Fundo de Garantia do Tempo de Serviço (FGTS) (US$ 4.3 billion) and reinforcement of Bolsa Familia (US$ 620 million);
- relaxation of labor laws to maintain jobs;
- aid for informal and self-employed workers (US$ 8 billion);
- extension of payment of taxes, FGTS and contributions reduction (US$ 6 billion);
- financial support to states (US$ 17.5 billion);
- financial support to the airline industry;
- expansion of liquidity in the markets, with the release of US$ 40 billion in compulsory deposits;
- support from Brazilian Development Bank (BNDES) and public banks (BNDES: US$ 11 billion + Caixa: US$ 15 billion + Banco do Brazil: US$ 25 billion);
- support for small and medium-size companies (US$ 8 billion);
- postponement of readjustment of pharmaceuticals products

Several tax measures were issued or announced in response to COVID-19, including a provisional measure (PM No. 927/2020). PM 927 provision follows: suspension of FGTS payment, credited BRL $5 billion from the Workers' Assistance Fund for micro and small companies, 50% reduction in contributions from Sistema S (joint system of social contributions paid by companies to finance the Autonomous Social Services) for three months.

The government also issued several provisions like salary and work hour reductions for up to 90 days, payment by government for the Income Preservation Benefit if salary or hours were reduced, authorized use of accrued and unused paid leave, etc. Also, employees entitled to receive the benefit could still receive unemployment insurance benefits. And there was no obligation to have collective negotiations for employees who earn less than $3,135 or more than $12,202 (BRL). Suspension of employment agreements, or furloughs, were to be allowed for up to 60 days and during this period, employees' current pay rate, hours and tenure must be preserved, and employees were entitled to all employer-provided benefits.

For further relief to the employees, the government announced to pay 100% of the unemployment insurance that employees would normally be entitled. For employers who earned more than $4,800,000 (BRL) gross revenue in 2019, the government was to pay 70% of the unemployment insurance, as long as employers pay 30% of their employees' salary during suspension.

Other than this, government invoked the escape clause of the constitutional expenditure ceiling to accommodate exceptional spending needs. Emergency measures have been included in a separate 2020 budget. This includes temporary income support to vulnerable households, lower taxes and import levies on essential medical supplies, and new transfers from the federal to state governments to support higher health spending and provide as much cushion against the expected fall in revenues.

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Kingdom of Saudi Arabia[1]

KSA is located in the Arabian Peninsula in the southwest of the continent of Asia. Its population is estimated at 34,218,169. KSA is divided into 13 administrative regions, each of which contains a number of governorates, and each governorate includes several centers that are linked to it administratively. There is no doubt that KSA economy is the largest in the Middle Eastern and North African (MENA) region; where KSA maintains a share of 25% of the gross domestic product of the countries of the region combined. Also, KSA plays a major role in the global economy, as is evident in KSA presidency of the G20 Summit of 2020.

As for the level of healthcare provided in the Kingdom, statistics showed that the total number of hospitals in KSA reached 498 in 2019, i.e. about 22.5 beds per 10,000 people, of which the percentage of hospitals affiliated with Ministry of Health (MOH) and other government agencies, is 67%. The percentage of physicians (including dentists) working in the health sector in KSA was about 33.1 per 10,000 people.[2]

Even before the first officially reported COVID-19 case that was reported on 2nd March 2020, the response of the KSA began early in two phases: The first according to the high order on the date of 27 January 2020, directing the formation of the supreme committee for applying all precautionary measures to mitigate the spread of the novel Coronavirus, COVID-19, which is headed by MOH Undersecretary for Public Health and includes 7 participating entities. Based on assessment of the global situation data, the response was escalated according to the high order on the date of 1 February, 2020, the newly formed COVID-19 Monitoring Committee held its first meeting to assess the current situation and take all necessary precautions to control COVID-19 outbreak in KSA, which is chaired by His Excellency the Minister of Health.[3]

1- Travel Restrictions and Support

a. Extension of the validity of exit and return visas[4]

On 2 July 2020,[5] King Salman issued a royal decree covering announcements several initiatives for mitigating the effect of COVID-19 pandemic on economic activities and the private sector. These included free extensions on the validity of residency permits, exit, visit and entry visas.
The validity of expired Residence Permits (Iqama) for expatriates who were outside the Kingdom on exit and return visa, which expired during the period of suspension of entry and exit to the country, were also to be extended for three months. The Iqama for expatriates inside the Kingdom and who arrived on a visit visa that expired during the period that the travel restrictions remain in effect, was also to be extended for three months for free.

b. Online initiatives for residents to return home[6,7]

In April 2020, Saudi Arabia launched an online initiative – 'Awdah' (return), offering air travel for foreigners wishing to return home after the Kingdom had already halted international flights as part of measures to combat the spread of COVID-19. The Awdah initiative was available for legal residents only.

The service was launched on 22 April 2020[8] and allowed residents to submit requests through the online platform "Absher" (www.absher.sa). The Saudi General Directorate of Passports, Jawazat accepted expatriates' applications for repatriation only if their respective home countries approved to take them in. Afterward, competent agencies in the Kingdom made travel bookings and contacted the foreign resident wishing to return home.

By June 2020, a total of 12,798[9] residents returned home regardless the travel ban. The Awdah initiative was carried out in cooperation with several government agencies; Ministry of Foreign Affairs, Ministry of Hajj and Umrah, Ministry of Human Resources and Social Development, National Information Center, General Authority of Civil Aviation, and Saudi Arabian Airlines, in addition to the security agencies; Ministry of Interior, Directorate of Public Security, General Directorate of Passports, General Directorate of Prisons, and General Administration for Expatriate Affairs.

2. Healthcare Provision

a. Free COVID-19 treatment for all citizens and residents[10,11]

In March 2020, King Salman bin Abdulaziz, the Custodian of the Two Holy Mosques, signed a royal decree that guarantee free medical COVID-19 related care to all citizens and residents; including illegal immigrant, at all government and private health facilities. The royal decree reflected the human and moral approach KSA adopted in pandemic management as well as the focus on public health and public health protection via delivery of necessary care that meets highest standards to population in-need, particularly vulnerable ones.

His Excellency the Minister of Health; Dr Tawfiq bin Fawzan AlRabiah, addressed the public to assure that appropriate medical care is available for the population with no

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discrimination regardless the residency status as per the royal decree in order to maintain the health security of KSA. His Excellency assured the public regarding the preparedness and availability of medical care at all health care facilities in coordination with all participating parties in health sector as well as acknowledging the role of other governmental agencies.

To further minimise the impact of the virus and extend help to its largest expat community i.e., 3 million Indians, Saudi Arabia worked closely with several governments. The Ministry of Health (MOH) issued an awareness guide (https://covid19awareness.sa/en/home-page) in several languages, including Arabic, Hindi, Urdu and English among other languages, to raise awareness about the spread of COVID-19. The ministry was producing and distributing pamphlet in various languages to communicate public health information to expats residing in the country. The mass-testing teams at COVID-19 test centres were equipped with translators to facilitate communication with expatriates. By mid-April, medical teams had begun actively conducting mass screenings in overpopulated areas, workers' housing units and places where previous cases had been uncovered in order to cease transmission.

b. Set up field hospitals to alleviate hospital overruns[12,13]

The Saudi government actively set up field hospitals for COVID-19 patients in an effort to relieve hospitals from being overburdened. Field hospitals were set up with an aim to receive cases that need moderate medical care, mild symptomatic cases.

In April 2020, utility company ACWA Power and construction solutions company Thabat Company signed an agreement to build a 100-bed mobile hospital in Madinah to treat COVID-19 patients. The mobile hospital was fully equipped with the required medical tools and equipment for treatment of COVID-19 and was to be used in different regions based on the need for treatment of COVID-19 cases. Further, after the pandemic ends the hospital will be included into MOH's hospital system.[14]

In June 2020, the Jeddah Health Affairs department opened a 500-bed field hospital set up on an area covering 8,000 square meters at the land of the Jeddah Exhibition and Convention Center in north Jeddah. The hospital includes all the auxiliary medical departments including laboratory, radiology, pharmacy and medical supplies.

The field hospital at Makkah opened with a capacity of 100 beds, covering an area of 2,000 square meters and included a laboratory, a pharmacy and a digital scanner technically linked with all hospitals, as well as operating rooms and medical supplies that are easy to disassemble and install in any location within 60 working hours.

Additionally, the Ministry of Defense also lent support and joined official authorities' efforts in curbing the spread of the virus by setting up mobile hospitals in various cities. These mobile units were supplied with advanced medicine and machinery to support the MOH's preventive COVID-19 measures. Further, these mobile hospitals were in the vicinity of public and military hospitals, ready for any emergency and to tackle the cause and development of the virus.[15]

c. Government emphasis on mental health during pandemic[16,17,18,19]

In order to deal with the mental health issues caused by the COVID-19 outbreak and subsequent lockdown, health chiefs in multiple health directorates/ regions such as Al-Jouf announced offering help to individuals feeling stressed due to the crisis at the Erada Mental Health Center.

Further, the government carried out several inspection trips to institutions, interviewed residents on phone to check on their well-being and offer them appropriate medical consultation. Follow-ups on patients suspected of contracting the virus also took place to help them tackle stress and identify the level of anxiety, with psychological and social support provided for them and their families.

To offer improved access and better care, MOH established a "937 Call Center", that provides round-the-clock medical and administrative services through a toll-free number (937). The services provided include emergency and routine health care. The public was quick to adapt to the new system and the daily number of calls received by the Center reached around 30 thousand, and each call was answered within 15 seconds.

To address mental health illness particularly among healthcare workers, the Saudi Health Services Program at the Royal Commission in Jubail launched a Psychological and Moral Support program to help healthcare employees at the Royal Commission Hospital, adapt to work stress and provide psychological support.

The program is a medical clinic based on support and mutual benefit for health practitioners and administrative staff, to share experiences and skills and help to adapt to

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work stress and provide psychological support to them in times of difficulties.

Managed directly by the psychiatric department which includes consultant doctors, specialists, social service specialists and psychiatry, the program is offered through a fully private medical clinic that helps employees find appropriate solutions to their health issues as a result of the psychological pressures they face during their work period.

The National Center for Disease Prevention and Control (Weqaya) also released a set of preventive guidelines to combat the COVID-19, which included a preventive guide for mental and social health. This guide suggested ways of overcoming stress and ways to take care of children, older people, healthcare workers, etc. A helpline number to contact the psychological counseling center was also provided.

Additionally, in response to the elevated risk from the COVID-19, numerous hospitals have accelerated telemedicine health services, by offering secure and virtual face-to-face interactions with doctors. Johns Hopkins Aramco Healthcare, Dhahran (JHAH) has also accelerated the launch of primary care and psychiatric video sessions to tackle increasing public health emergency. It has been cited that video consultations are better than over the call service as the former allows improved quality of clinical assessment.

Saudi Commission for Health Specialties (SCFHS) established an initiative namely Daem, which aims at protecting health practitioners and help them achieve their goals and overcome obstacles. Through this initiative, SCFHS provides psychological support to all health practitioners in Saudi Arabia. Further, SCFHS also aims at reducing the psychological pressures faced by the health practitioners, particularly during the pandemic. The initiative is available for the health practitioners currently working in Saudi Arabia and trainee in one of the postgraduate programs of SCFHS.[20]

d. Designated additional hospitals and increased rate of testing[21]

Saudi Arabia had been recognized globally for its efficient strategy to mitigate the spread of the pandemic. Based on its experience with MERS-CoV, in early January, the country acted very swiftly to develop country-specific guidelines based on WHO recommendations for pandemic management.

Since the declaration of the pandemic, MOH continued to activate active surveillance, and expand testing measures to all suspected cases being investigated, particularly at points of entry. Confirmed cases were immediately isolated and treated. In March 2020, MOH designated 25 hospitals with a total bed capacity of 80,000 hospital beds among which 2,200 beds were for isolation of suspected/quarantined cases and 8,000 intensive care unit (ICU) beds for the treatment of COVID-19 patients. With the further spread of the pandemic, various mobile and field hospitals were set up prevent the COVID-19 designated hospitals from being overburdened and provide moderate medical care to patients with mild symptoms.

In April, the country commenced the first phase of mass screenings to prevent the spread of the infection and identify potential areas for community outbreak to allow for early containment. During a mass screening procedure, medical teams visited epicenters and conducted a mass community screening. By the end of April 2020, more than a million people in the Kingdom had benefited from mass COVID-19 testing since the initiative was launched. Further, as of 19 April, 82 percent of the country's cases had been identified through active screening.

The second phase started on 4 May (the 10th of Ramadan), and involved testing of individuals who had scheduled COVID-19 tests through the government's application "Mawid". The third phase announced on 19 May, involved testing at drive-through centres in several cities while also offering testing services at primary health care centers. It also allowed citizens and residents to book appointments to collect their own test samples through an online application. Drive-thru COVID-19 testing centers in Riyadh, Jeddah and Dammam had the capacity to test up to 5,000 patients.

In June 2020, MOH launched "Tetamman" or fever clinics, operating 24/7 and tasked with receiving anyone experiencing COVID-19 symptoms. The 31 clinics started operations in six cities; Riyadh, Al-Ahsa, Qassim, Jeddah, Makkah and Madinah, with plans to expand the network of clinics across other Saudi cities.

Further, Takkad centers launched a 24-hour testing service as part of an early detection campaign to contain the spread of the novel coronavirus. By August 2020, Tetamman and Takkad centers had carried out more than 2 million polymerase chain reaction (PCR) tests across the Kingdom since the start of the pandemic. Takkad centers are designated for people having no or only mild symptoms, but who believe they might have come into contact with a person infected with COVID-19.

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3. Enabling Measures

a. Digital initiatives to combat COVID-19[22,23,24,25,26,27]

Saudi Authority for Data and Artificial Intelligence, in collaboration with MOH, launched Tabaud (Distancing) to warn people in crowded areas about co-existing individuals who have contracted COVID-19 during the last 14 days. The application ensured the privacy and protection of users' identity.

Previously in March 2020, MOH updated the Mawid app that can guide citizens and residents on whether to self-isolate or visit a medical facility after registering their recent travel history and any coronavirus symptoms they might be showing. Initially, launched in 2019 to implement digital technology in the healthcare system, the app is provided by Ministry of Health to enable patients to book, cancel or reschedule their medical appointments at primary health care centers, as well as managing their referral appointments.

Other e-health services offered by the Ministry of Health during COVID-19 included:

- An e-prescription service which allows patients to share symptoms with an online doctor before receiving a pharmacist-approved prescription based on the virtual consultation.
- The e-health "Seha" for doctors' app provides online medical consultation through MOH's accredited doctors in all specialties and enables patients to get these consultations via chat, voice or video calls.
- Mawared is an Enterprise Resource Planning (ERP) app to deliver official self-services to MOH's staff. The app serves as the single official channel to apply for all types of leave, including annual, sick and casual as well as other assignments.
- Tataman is an app providing protection and health care for those referred to domestic isolation or quarantine to maintain their safety and enhance their recovery procedures.
- Taqasi, a platform designed to sustain health in Saudi Arabia and take protective measures against the coronavirus.
- Health Electronic Surveillance Network (HESN) is a web-based electronic health solution, which helps the public health programs and health sector to access the preventive information of any disease. The main aim of HESN is to enhance the public health surveillance system and improving public health outcomes through raising immunization coverage and reducing morbidity and mortality.[28,29]
- Sehhaty is an application enabling the users to receive health information and medical e-services provided by different health organizations in the Kingdom. The app offers a wide range of information including vital signs updates, tracking prescribed medicine, retrieving and sharing sick leaves, promoting a healthy lifestyle.
- Tabaud App is one of technical solutions introduced by the Saudi Data and Artificial Intelligence Authority (SDAIA). It is developed for tracking the spread of Covid-19 in the KSA. The application allows its users to know if they have come in contact with any person infected with Covid-19. Furthermore, the application also sends proactive notifications to users, if any confirmed cases is detected by the application in the past fourteen days, along with maintaining data confidentiality.[30]
- Tawakkalna is another application used for tracking Covid-19 patients, which was launched by the collaboration between the SDAIA and MOH. It shows the users with their health status through colored codes and maintains the highest levels of data safety and privacy. The application also helps to report about any suspected Covid-19 cases or any gatherings that may violate precautionary measures. This will further help in breaking the chain of infection in the KSA.

Economic Measures and Employment Assistance

a. Providing employment assistance to workers[64]

The Saudi government has been very responsive and committed in revising their employment laws and working requirements to achieve an appropriate balance between safeguarding employees' health and supporting businesses. In response to the threat of job losses amid the pandemic, the Saudi government updated the labor law. In April 2020, the government announced to pay 60% of the salaries of Saudi employees working in the private sector for a period of three months with a ceiling of $2.4 billion. The compensation was to be paid in accordance with the conditions stipulated in the unemployment insurance system (SANED).

Further, the royal decree allowed the employer and employee to agree within six months on either reducing the employee's wage to adjust with the actual work hours (up to 40%), or granting the employee a local leave to be de

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ducted from his/her deserved annual vacation, or granting him/her an exceptional leave.

The government also allows a temporary benefit from the services of off-labor-market residents through the "Ajeer" portal as a substitute to recruiting from abroad. With this the government wanted to protect workers during such circumstances from being terminated or losing their contractual benefits.

It is expected that the government's aid will be beneficial for over 1.2 million Saudi employees. Employers benefiting from this scheme were not legally obliged to pay employees' salaries to the full rate of pay. However, employers were advised to remain cautious of any differential treatment among employees and the problems a two tier-workforce can cause.

b. Donation to World Health Organization (WHO)[32,33,34]

In March 2020, Saudi Arabia's King Salman issued a directive ordering the donation of USD 10 million to support the World Health Organization's (WHO) efforts to fight COVID-19. The government of Saudi Arabia provided the funds to WHO for the implementation of urgent measures for minimizing the spread of the disease along with offering support to other countries with vulnerable health infrastructures.

In addition to this, on 18 September 2020, the government of Saudi Arabia also pledged to donate USD 100 million for supporting the United Nations and its agencies along with the WHO in the international response to the COVID-19 pandemic. This donation is a part of Saudi Arabia's international efforts to support the world to fight against the pandemic. Furthermore, through this the government of Saudi Arabia is emphasizing on the importance of cooperation, solidarity and team work on an international level to reinforce a transparent, strong, coordinated and broad global response. The main aim of donating these funds was to assist the UN in helping vulnerable economies across the globe to combat the pandemic with a focus on assisting refugees, raising the standards of living among the world's poorest groups, developing fragile economies, mediating an end to conflicts, and building more harmonious relationships between nations.

c. Dedicated support measures for private sector[35]

Saudi Arabia implemented several measures to mitigate the impact of the coronavirus pandemic on its economy and support the private sector. The Kingdom announced a set of support packages worth $61 billion to support the private sector. These include exemptions and the postponement of some government dues ($18.6 billion), a $13.3 billion package to support the banking and Small & Medium Enterprise sectors, a $13.3 billion allocation to ensure that government dues to the private sector are paid in a timely manner, and a wage subsidy of 60% (up to SAR 9,000 per employee per month) of Saudi employees' salaries in the private sector.

The government allocated SAR 4 billion to provide employment support and training programs to help more than 300,000 beneficiaries to work in the private sector. A sum of SAR 1 billion was allocated to private sector employees who have not previously benefited from the support programs available. SAR 4 billion was provided as social loans to low-income families during 2020, with 100,000 Saudi citizens set to benefit.

The country also announced a year's extension for private sector loan payments to reduce the impact on businesses from the pandemic and the subsequent lockdown. Further, to support 6,000 male and female entrepreneurs, an increase in the direct lending portfolio for micro and small enterprises to SAR 2 billion was announced.

Additionally, several tax related measures were announced by the government, including extending deadlines for filing tax returns and paying those taxes. A sum of $13.3 billion was injected into the banking sector to enhance banking liquidity and enable banks to continue providing credit facilities for the private sector.

d. Phased approach in relaxing curfew and restrictive measures to combat pandemic[36,37]

On April 6, Saudi imposed a 24-hour curfew and lockdown on the cities of Riyadh, Tabuk, Dammam, Dhahran, and Hofuf and throughout the governorates of Jeddah, Taif, Qatif, and Khobar. Later, from 26th April, curfew restrictions were partially lifted, and public was allowed to move between 9 AM to 5 PM until May 13th.

Afterwards, Saudi adopted a three-phase return to normality starting from May 28 when curfew times and travel restrictions were eased, and the curfew completely ended on June 21. The decision was taken after continuous coordination between the MOH and the concerned authorities, relying on a focused plan that seeks to balance between procedures for reopening economic activities and maintaining the stability of health and social conditions.

The authorities announced that malls and shopping markets could open, however under very strict guidelines.

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These included social distancing, wearing face masks, advising children and the elderly to remain home, and ensuring that all customers at entry point at such venues were screened for body temperatures.

The government also relaxed the restrictive movements during curfew, allowing residents to travel to other cities except to Makkah.

Curfew hours were relaxed to between 9am and 5pm, and mosques, schools, restaurants, and other public areas where crowds would normally gather in proximity of each other remained closed, and social gatherings of more than five people were banned.

The pandemic also forced the Saudi government to downsize the annual hajj pilgrimage and bar millions of international pilgrims from attending the five-day ritual. The Saudi authorities only allowed 10,000 pilgrims from among citizens and foreign residents of the KSA to perform Hajj. Pilgrims were required to wear masks and electronic wristbands that monitor their movements, a COVID-19 test and a short quarantine were also required ahead of the pilgrimage.

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Turkey

Turkey is a transcontinental country located mainly on the Anatolian peninsula in Western Asia, with a smaller portion on the Balkan peninsula in Southeastern Europe is a member of the Euro-Mediterranean partnership.

Turkey has been displaying progressive performance in economic and social development since 2000, leading to increased employment and income. However, in the past few years, growing economic vulnerabilities and a more challenging external environment have threatened to undermine those achievements. While Turkey's economy is expected to contract in 2020 for the first time in more than a decade as the pandemic and related restrictions hit demand, but it is expected to bounce back next year. Amongst all G20 countries, Turkey experienced the highest annual growth with 4.4% in the second quarter of 2020.

In terms of healthcare capacity, Turkey is an above average country with good resources. In terms of beds per person, Turkey ranks 30th out of 42 OECD countries. However, the country has high number of ICUs with 29.4 per 100,000 people. In March 2020, the number of beds per 1,000 inhabitants was about 2.8 in Turkey, which increased with new the opening of new hospitals.

During the outbreak, two new emergency hospitals were opened with 1,008 beds each. In addition to this, other hospitals like Basaksehir Cam and Sakura City Hospital with 2,682 beds, and Okmeydani Prof. Dr. Cemil Tascioglu City Hospital with 600 beds were also opened in Istanbul during the outbreak.

According to a latest survey conducted, it was reported that the recovery rate and death rate of all confirmed cases in Turkey were 89.3% and 2.4% respectively. The country experienced a positive trend of growing rate of recovery and decreasing mortality rate recorded in the month of August.[1]

1. Travel Restrictions and Support

a. Restricted movement and secured food supply[2,3,4]

In March 2020, Turkey reported its first COVID-19 case and quickly implemented social distancing, mobility restrictions and health policies. The government closed schools, universities and public places and restricted movement for elderly population and those suffering from chronic diseases. Additionally, duration of street wedding parties in Ankara were limited to two hours, mass serving of food to wedding attendees was banned, and usage of a fiberglass separator in public vehicles between drivers and passengers was required.

Movement restrictions and closing of public place did not hamper the food supply in the country. Turkey secured the agricultural production process and food supply such as the allocation of idle agricultural lands under the public domain to farmers to grow certain types of products, such as cereals and oilseeds.

The government undertook several measures to help farmers and food-related business operators by postponing tax payments, advancing agricultural support payments and providing interest-free loans for investment and operation which are provided for small farmers and processors.

There was also a campaign to promote the retail sale of fish at wholesale prices launched with an aim to boost the household consumption of fish. This was beneficial both from a nutritional perspective and for supporting producers.

b. Repatriated Turks from other countries and supported residents to leave Turkey[5]

As of May 29, Turkey had repatriated 75,000 people from 126 countries with 365 flights, 34 land and 10 sea trips. Those arriving in the country were initially subjected to a mandatory 15-day quarantine, however later citizens were asked to self-isolate in their homes.

The country's Deputy Foreign Minister also stated that over 200,000 foreigners had already left Turkey by May 2020, of which nearly 20,000 of them were able to leave Turkey with special permits and support provided by the Ministry of Foreign Affairs.

c. Prioritized expats over Turks for downsizing[6]

Earlier, Turkish carriers would recruit large numbers of foreign staff, with the proportion of overseas crew reaching 11%. Now, due to global lockdown and restrictions on international flights, air carriers are facing severe financial constraints. Therefore, in order to sustain many carriers are sacking few of their employees.

In August 2020, Turkey's Directorate General of Civil Aviation (SHGM) wrote to 10 operators, including flag-carrier Turkish Airlines and proposed to sack foreign pilots and cabin crew before local workers as the COVID-19 started to destroy demand and jobs in the industry. The authority requested to reduce the proportion of foreign staff in the aviation industry so that Turkish nationals are no longer at a disadvantage.

Turkish unions have also been calling on carriers to employ more Turkish staff, as the pandemic pushes Turkish

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unemployment close to 13%. On the other hand, Turkish Airlines clashed with unions over proposals to half pilot wages and cut salaries for other staff members to help shore up its finances during the pandemic.

2. Healthcare Provision

a. Key Role of field hospitals[7]

The Turkish Ministry of Health with Ministry of Health National Medical Rescue Team (UMKE) started building field hospitals at border gates to prevent the virus from entering and spreading in Turkey. They were 200 meter away from the border gates with Syria, Iran, Iraq and Georgia in February and March as per the COVID-19 measures and Turkish citizens were subjected to medical observations.

- 4-separate 100-bed Field Hospitals were established at the Sarp Border Gate, Çıldır-Aktaş Customs Gate and the Posof/Türkgözü Border Gate with Georgia.
- 6 Field Hospitals were established on the border line from Gaziantep-Karkamış to Mardin-Nusaybin on the Syrian border, and at the customs area at the Gürbulak Border Gate and the Kapıköy Customs Gate on the Iranian border by the National Medical Rescue Team (UMKE) consisting of the Ministry of Health professionals and volunteer healthcare providers.

Citizens admitted to these hospitals are isolated for 14 days, the field hospitals thus act as first line of medication and prevention against novel coronavirus. These hospitals are also capable of performing minor operations and thus played a pivotal role in the battle against the pandemic.

Since they played a crucial role in mitigating the effect of the virus, the field hospitals were later announced to be built-in Istanbul on the Anatolian and European Side. The construction/installation work of two separate 1,000-bed Field Hospitals at Yeşilköy Atatürk Airport and in Sancaktepe (former military land) were initiated in April in order to provide administrative, operational and humanitarian aid. After Istanbul, Kocaeli, which is one of the most affected cities by the outbreak, a field hospital would be established next to the Kocaeli Derince Training and Research Hospital.

Other than Ministry of Health and Disaster and Emergency Management Presidency, field hospitals were extensively used by the Turkish Armed Forces (TAF). A 30-Bed Mobile Surgical Hospital and Mobile First Aid Station was established, consisting of total 38 containers and 42 shelter tents. The emergency unit of the Mobile Surgical Hospital could become ready to serve within 2 hours, with all units in 3 hours, and the emergency unit of the Mobile First Aid Station within 1 hour and 15 minutes, with all units in 2 hours. In case of a military expedition, a total of 223 personnel, 31 of whom were medical doctors, 39 officers, 49 noncommissioned officers, 24 civil servants and 111 rank and file were rendering services in both hospitals. The hospital was able to serve in conditions between -32°C and + 49°C.

b. Distributed free masks and offered free testing and treatment[8,9,10]

In April 2020, when other countries were struggling, the Turkish Health Ministry and the Transportation and Infrastructure Ministry jointly decided to distribute free masks to citizens, approximately 82 million residents. Citizens could apply for free masks through the country's postal service's e-commerce website, ePttAVM.com until the end of the outbreak. Through this website citizens can register to receive five free surgical masks per week. The move came into effect when President Erdogan banned the sale of masks amid accusations of price-gouging.

Turkey has been one of the world's leading producers of medical personal protective equipment (PPE). And, with ban on surgical masks due to accusations of price-gouging, a potential source of income could be killed. Irrespective of that, the Turkish Health Ministry announced that all equipment, tests, kits, drugs used during the treatment will be provided free of charge by the Ministry.

When the cases started rising, the hospitals quickly made necessary changes in their facility which proved to be very helpful. All the city hospitals created negative pressure rooms also known as airborne infection isolation rooms, these cleansed the virus-riddled air of hospital wards, stopped the virus from infecting people outside the area where coronavirus patients were being treated. It also provided a sigh of relief to the staff as they did not have to wear cumbersome protective suits.

The country also constructed new hospitals to help combat the outbreak, like the Başakşehir City Hospital in Istanbul with 2,000-bed capacity, a new hospital in the city's Okmeydanı district with more than 600 beds and 99 high-tech intensive care units.

3. Enabling Measures

a. Digital initiatives to fight against COVID-19[11]

To further strengthen its measures and have a robust tracking system to notify proximity of COVID-19 infected people, the Turkish Ministry of Health in cooperation

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with local cell service providers, launched an application to track the movement of patients diagnosed with the coronavirus through their smartphones to prevent further infections. The app was made mandatory for all confirmed COVID-19 patients, and those found to be leaving their homes by GPS tracking, received automated text messages and calls asking them to return to certain quarantine areas. The application can track intercity travel and shows risky areas and violations of social distancing using Bluetooth technology.

Citizens can board planes and trains within Turkey after using the code from the app to show that they are not sick or carry the virus. It is mandatory for all confirmed coronavirus patients, and those found to be leaving their homes by GPS tracking, receive automated text messages and calls asking them to return to certain quarantine areas.

Additionally, young Turkish entrepreneurs developed a novel mobile application, "CoroWarner" app which allows community-driven contacts tracing. The app alerts when a person is in a close contact with someone who has been tested positive without revealing this person's identity.

4. Economic Measures and Employment Assistance

a. Announced financial and employment assistance[12,13]

Although, the country was quick to impose various restrictions while maintaining peace, the lockdown did deteriorate its economy. To compensate for the loss and minimize to an extent that can support the people for some time, Turkey announced a 21-point stimulus package, Economic Stability Shield worth $15.4 billion to tackle the coronavirus pandemic, which includes:

- a three-month deferral of loan payments by companies,
- additional financial support to affected businesses,
- reduction of VAT on domestic air travel from 18% to 1% for three months,
- accommodation tax will be cancelled until November,
- social security premiums will be deferred by six months for retail, iron and steel industries, shopping malls, automotive, entertainment and hospitality sectors, food and beverage businesses, textiles as well as event organization sectors,
- stock financing assistance to importers who are affected by the global pandemic.

The Turkish law also states that employers cannot terminate unilaterally employment or service agreements, unless based on immoral, dishonorable or malevolent conduct or other similar act or behavior of the employee.

Turkish State's unemployment fund announced to pay a salary support of TRY 39.24 per day to furloughed employees, if such employees (i) cannot benefit from the short-term working allowance; and (ii) do not receive a pension pay from any social security organization at the same time.

The Turkish Central Bank cut its key interest rates by 100 basis points and aimed to provide banks with as much liquidity as they required through intraday and standing overnight facilities.

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United States of America

The United States of America is a constitution-based federal republic comprised of 50 states. The US economy is the world's largest in terms of gross domestic product, and the most technologically powerful. The country often takes a leading role in international organizations and was a founding force behind institutions such as the United Nations, NATO and the World Bank. It is also ranked 2nd amongst the G20 countries, based on competitiveness.

On 20 January 2020, the first reported case of COVID-19 was confirmed in the State of Washington as the patient had returned from Wuhan on 15 January. As a result, the government initiated rapid developments to control situation within the US.

As of 5 September 2020, the cumulative rate of laboratory-confirmed hospitalizations related to COVID-19 in the US was 166.9 per 100,000 population. It was highest amongst the people of age above 85 with 814.6 per 100,000 and was lowest amongst the youngsters between 5 to 17 years with 9.7 per 100,000.

As of May 2020, US had nearly 2.6 physicians, 8.6 nurses per 1,000 inhabitants, and 2.9 beds per 1,000 people. This shortage of resources created the need for more facilities in the country, and the US government opened additional resources like hospital ships – USNS Mercy (T-AH-19) and USNS Comfort (T-AH-20). These were deployed to assist people in coastal areas. All of these hospital ships have 12 fully equipped operating rooms, a 1000-bed hospital facility (including 80 intensive care beds, 20 surgical recovery beds, and 280 intermediate-care beds), digital radiologic services, medical laboratory, pharmacy, optometry laboratory, CT capability, and two oxygen-producing plants. Also, they are equipped with a helicopter deck capable of landing large military helicopters. The ships have side ports to take on patients at sea. Their crew comprises 71 civilians and up to 1200 Navy medical and communications personnel when operating at full capacity.

1. Travel Restrictions and Support

a. Restrictions on entering US from China[1]

On 31 January 2020, the US announced that it was restricting entry to its ports from China and foreign nationals would be denied entry if they had visited China in the previous two weeks. The temporary restrictions followed announcements by major airline companies including American Airlines, Delta Air Lines and United Airlines that decided to suspend air service between the US and China for several months.

The policy response initially appeared to be promising as the first case in the US had been identified on 21 January. However, some exceptions to the policy such as those related immediate family members of American citizens and permanent residents returning from China, created some significant loopholes in the effectiveness of the policy. In the two months after the policy went into place, almost 40,000 people arrived in the US on direct flights from China.

More importantly, the policy failed to consider that the virus had spread beyond China by early February and many infected people kept entering the country from Europe until March. It was on 11 March, that the administration implemented travel restrictions from Europe and at that point, New York already had 216 cases. It was later found that travelers from Europe—not China—were the primary cause of the COVID-19 spread in the New York region.

It was also noted that the administration did not act fast in creating quarantines for those entering the US borders and may have carried the virus.

b. Repatriated US nationals from other countries[2]

The US State Department of Foreign Affairs coordinated the repatriation of 101,386 Americans on 1,140 flights from 136 countries between 27 January and 10 June. The local US Embassies, with the State Department helped, arranged for Americans to get on scheduled commercial flights. In cases when the local airport was closed, the State Department helped arrange charter flights from commercial airlines.

c. Immigration put on hold[3]

As countries across the world imposed lockdown and implemented temporary travel bans, the US also put most of its immigration process on hold, temporarily stopped issuing green cards and deported illegal immigrants to their respective countries.

2. Healthcare Provision

a. Offered free COVID-19 treatment for uninsured patients[4]

The US Administration confirmed in April 2020 that the government will allocate an unspecified amount of federal aid to help hospitals cope with the expense of treating uninsured COVID-19 patients. The Health and Human Services Secretary announced the payments for patients without health coverage as part of several strands of

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funding the government will distribute from a federal relief package to hospitals and other health-care facilities and practitioners overwhelmed financially by the coronavirus pandemic.

In addition to the $30 billion already dispensed from a $100 billion fund, $20 billion was going to be disbursed to a broader range of facilities, such as children's hospitals, in order to support these hospitals in providing care.

Another $10 billion was going to be directed to hospitals and clinics in rural areas, where healthcare facilities tend to be financially fragile, while $400 million will be given to Indian Health Service facilities.

b. Set up field hospitals to treat COVID-19 patients[5]

With the rapid growth in the number of confirmed COVID-19 cases in the US, many states experienced a shortage of hospital-especially ICU-beds. In addition to discharging non-critical patients, expanding local hospitals' capacity as well as re-opening closed healthcare facilities, the government actively converted several public venues into field hospitals to bridge the gap.

The Army Corps of Engineers contracted with private companies to convert convention centres and other sites into emergency field hospitals around the country. The federal spending on setting up these field hospitals totalled more than $660 million. Public health experts praised the Army Corps for quickly providing thousands of extra beds and said that there was inadequate planning to make sure the field hospitals could be put to use upon completion.

In April 2020, workers at Chicago's McCormick Place transformed the convention centre into a 3,000-bed temporary hospital. However, as construction got underway, states started issuing stay-at-home orders and the spread of the virus eventually began to slow. The field hospital opened with one-third of the beds originally planned and closed a few weeks later after treating fewer than 40 patients. Similar situation was observed across the country, in fact, most Army Corps field hospitals did not treat a single patient.

The government officials were of the opinion that it is a huge success for the whole country if such facilities sit empty and people and stay at home orders have been able to reduce the spread.

c. Testing kits and medical supplies[6]

The US opted to develop its own testing kits. While the US President allocated USD 25 billion for testing in April 2020, several barriers like shortage of supplies, absence of comprehensive national plan to distribute tests to critical places, and lack of planning prevented the country from deploying the kind of mass testing program it needed.[7]

The paucity of medical supplies led doctors and nurses to request for items online. Dressmakers were asked to make masks for hospital workers.

Further, due to its decentralized federal system, individual US states started lifting lockdown orders at different times. As the pandemic started worsening, some state governors adopted stringent measures and others disregarded the need for immediate action. Georgia, for example, ended its lockdown order on April 30, and most other US states began relaxing their lockdowns from mid-May to mid-June.

d. Importing of Anti-Malaria drug from India

The US Food and Drug Administration identified Hydroxychloroquine as a possible treatment for the COVID-19 and anticipating positive results the US President in April 2020, asked India's Prime Minister Narendra Modi to lift the hold on American order of the anti-malarial drug, of which India is the major producer.

India, which manufactures 70 percent of the world's supply of hydroxychloroquine, lifted the ban and cleared the export of 35.82 lakh tablets of hydroxychloroquine to the US along with nine metric tons of active pharmaceutical ingredient or API required in the manufacturing of the drug.

3. Enabling Measures

a. Digital Initiatives

The US government initiated important digital measures like COVID-19 dashboard, COVID-19 contact tracing applications, etc. with the view to reduce the spread of virus.

Contact Tracing Application[8,9]

The government introduced a contact tracing application on 05 April 2020 to control the spread of the virus. The participation for this app is voluntarily. The main focus of the app is to help in tracing the contacts of infected people, which may help in faster detection and containment of virus. Further, the app provides information related to the hotspots, which may help in understanding the regions with maximum cases.

In August 2020, Virginia launched a contact tracing appli

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United States of America Cont...

cation, which uses Bluetooth for contact-tracing. This is the first application in the US, which uses a privacy-protecting system announced by Apple and Google.

COVID-19 Tracker[10]

Another initiative undertaken by the US government is maintaining a real-time COVID-19 tracker. It provides real -time country as well as state level information regarding the number of cases, deaths, number of tests conducted, community impact (including school closures, impact on mobility). It covers historic as well as current data. In addition to this, it also provides information related to the testing laboratories across the US. This tracker is available on the website of Center of Disease Control and Prevention.

4. Economic Measures and Employment Assistance

a. Distribution of Economic Impact Payments for residents[11]

The Coronavirus Aid, Relief, and Economic Security (CARES) Act, was passed on 27 March,2020 and provides economic support for all American citizens and Green Card Holders and some specific Visa holders in the US, who earn up to $99,000 per person (or $198,000 for joint filers). The government distributed $1,200 per adult and $500 for each dependent child under the age of 17 years old – or up to $3,400 for a family of four and to qualify for this relief, the individuals were required to have a US social security number, and file US taxes.

By implementing the CARES Act, the US Treasury Department also announced steps to preserve jobs in industries adversely impacted by the COVID-19 outbreak. The Act announced financial support to American businesses and job creators so they can better support employees and be prepared to get back to business as soon as possible.

- **Employee Retention Credit:** Employers of all sizes that face closure orders or suffer economic hardship due to COVID-19 were incentivized to keep employees on the payroll through a 50% credit on up to $10,000 of wages paid or incurred from 13 March 2020 through 31 December 2020.
- **Payroll Tax Deferral:** To enhance cash flow and enable businesses to better maintain operations and payroll, employers and self-employed individuals can defer payment of the employer share of the Social Security tax they otherwise are responsible for paying to the federal government with respect to their employees. The deferred employment tax can be paid over the next two years—with half of the required amount to be paid by 31 December 2021 and the other half by 31 December 2022.[18]
- **Payroll Support:** The Treasury published resources to assist some eligible businesses in applying for payroll support to enable the continued payment of employee wages, salaries, and benefits, and for loans pursuant to the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

The government also announced tax breaks for US citizens and residents living overseas by introduction of Foreign Earned Income Exclusion (FEIE) and associated Foreign Earned Housing Exclusion. They are one mechanism to combat the double taxation that happens when their income is taxed by both the US and the country in which they live. They also help offset costs and compensate for the fact that many expats are not using US taxpayer-funded services while abroad. Further, the exclusions allow them to safeguard over $100,000 per year of employment income or other “earned” income from US taxes.[13]

US expats can qualify for the FEIE in two ways:

- The Bona Fide Residence (BFR) test, which takes into account various facts and circumstances, and
- The Physical Presence Test (PPT), which takes into account the number of days an expat spends abroad vs. in the US (among other factors). The PPT is often referred to as the 330-day rule (for the number of days an expat needs to stay outside the US in 12 months to qualify).[14]

In addition to these measures, the US President Donald Trump signed a USD2 trillion rescue package in March, providing the much-needed financial relief for millions of Americans and secure the country's economy weakened by the coronavirus pandemic. A sum of $100 billion was allocated to healthcare providers, including hospitals on the front lines of the pandemic; and $27 billion was set aside for bolstering life-saving capabilities, including developing vaccines and the development, purchase, and distribution of critical supplies.

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دور الحكومات في دعم المواطنين والمقيمين خلال جائحة كوڤيد-١٩: تجربة البرازيل، المملكة العربية السعودية، تركيا، الولايات المتحدة الاميركية نموذجًا

أُعدت المقالة بالتعاون بين المركز الوطني الصحي للقيادة والتحكم، وكالة الصحة العامة- مركز القيادة والتحكم، المركز العالمي لطب الحشود

الملخص :

في أواخر العام 2019 سجلت مستشفيات مدينة ووهان الصينية بإقليم هوبي مجموعة عنقودية من حالات الإصابة بالتهاب الشعب الهوائية الحاد الغير محدد السبب، كانت هذه الحالات هي أوائل حالات الإصابة بكوفيد-19. لوحظ أن جميع الحالات مرتبطة بشكل أو بآخر بسوق السمك المحلي. ما لبثت المسألة أن تطورت سريعًا ليتم الإعلان عن حدوث فاشية شملت كافة الأراضي الصينية في شهر ديسمبر من العام 2019. توالى بعد ذلك تسجيل الحالات خارج الأراضي الصينية نتيجة ديناميكية حركة السفر والتنقل بين الدول، الأمر الذي دفع منظمة الصحة العالمية إلى الإعلان أن كوفيد-19 يمثل جائحة تهدد الصحة العامة وعلى كل العالم التعامل معها على هذا الأساس.

تزامن إعلان منظمة الصحة العالمية مع الجهود التي بذلتها الحكومات لاعتماد استراتيجية الاستعداد والاستجابة للتعامل مع جائحة كوفيد-19 وما قد يترتب عليها من آثار، في ذات السياق، حرصت الحكومات على الاستفادة من الخبرات عبر تبادل التجارب والبيانات وتعزيز دعم البحوث التي تهدف إلى دراسة سلوك الفيروس وتحديد آلية انتقال العدوى وتحديث الأدلة التشخيصية والعلاجية. خاصة أن الجائحة لم تؤثر على صحة المجتمع فحسب بل امتدت لتشمل النواحي الاقتصادية والاجتماعية والسياسية، إذ ارتفعت معدلات البطالة نتيجة الركود الاقتصادي العالمي الأمر الذي انعكس سلبًا على سلوك الفرد والمجتمع وصحته إضافة إلى حالة عدم الاتزان التي أصابت عددًا من الأنظمة الصحية العالمية، كما أثر بشكل سلبي على القدرة الشرائية للفرد. الأمر الذي حدا بالحكومات إلى إصدار عدد من الحزم الإصلاحية للتقليل من أثر الركود الاقتصادي وتقديم الدعم المناسب لأفراد المجتمع.

هذه المقالة تقارن بين البرازيل والمملكة العربية السعودية وتركيا والولايات المتحدة فيما يتعلق بالاستجابة الحكومية إبان الإعلان عن جائحة كوفيد-19 وما تم حيال تعليق حركة السفر، مراجعة السياسات الصحية، دور الحكومة في تمكين القطاع الصحي وأخيرًا الحزم الإصلاحية لمواجهة الركود الاقتصادي.

الولايات المتحدة الأمريكية:

سُجلت أول حالة لكوفيد-19 في الولايات المتحدة الأمريكية في تاريخ 20 يناير 2020 في ولاية واشنطن وكان المريض قد وصل من ووهان الصينية في 15 يناير 2020. على إثر ذلك قامت الحكومة الأمريكية بتفعيل الإجراءات الرامية إلى احتواء الأزمة. في الخامس من سبتمبر لنفس العام وصل المعدل التراكمي للحالات المُشخصة مخبريا إلى 166,9 لكل 100ألف نسمة. الأمر الذي دفع بالحكومة الأمريكية إلى تفعيل العمل بالإجراءات الاحترازية والتي شملت:

تعليق حركة الملاحة الجوية:

علقت الحكومة الأمريكية دخول المسافرين القادمين من الصين أو من دول أخرى في حال مرورهم على الصين في 31 يناير 2021 وعلى إثر ذلك قامت شركات خطوط الطيران الأمريكية بتعليق رحلاتها إلى الصين. ونتج عن إعلان منظمة الصحة العالمية حالة الطوارىء العالمية نتيجة جائحة كوفيد-19 تعليق الرحلات من وإلى دول الاتحاد الأوروبي خاصة بعد تزايد حالات الاشتباه بين المسافرين القادمين من دول الاتحاد الأوربي.

وزارة الخارجية الأمريكية قامت بتنسيق إجلاء 101386 مواطن أمريكي من 136 دولة خلال الفترة بين 27 يناير و 10 يونيه 2020 من خلال تضافر الجهود بين سفارات الولايات المتحدة في الدول المختلفة مع وزارة الخراجية لتنسيق عمليات الإجلاء وحجز الطائرات والتنسيق مع السلطات المحلية بالمطارات. إضافة إلى ذلك، قامت الولايات المتحدة الأمريكية بتعليق كافة إجراءات طلبات الهجرة، كما علقت إصدار الإقامات الدائمة بشكل مؤقت، كما تم ترحيل المهاجرين غير الشرعيين إلى دولهم.

توفير الرعاية الصحية المطلوبة:

أعلنت الحكومة الأمريكية عن تخصيص ميزانية مفتوحة لتمكين المرافق الصحية من تقديم الرعاية الصحية اللازمة للمرضى الغير مؤمنين، كما تم تخصيص عيادات لتقديم الرعاية الصحية اللازمة لمرضى كوفيد-19 في المناطق النائية والقرى. تزامن التزايد المضطرد في عدد الحالات المسجلة لكوفيد-19 مع نقص حاد في الأسرة في بعض الولايات الأمر الذي تطلب خروج الحالات المنومة غير الحرجة و توسيع الطاقة السريرية للمرافق الصحية المحلية وذلك بإعادة فتح المرافق التي تم إغلاقها سابقا. وقام فيلق المهندسين بالجيش بالتعاقد مع شركات خاصة لتحويل مراكز المؤتمرات إلى مستشفيات ميدانية لسد العجز في السعة السريرية.

نظرا لتزايد الحاجة إلى المواد المطلوبة لإجراء الفحوص المخبرية، خصص الرئيس الأمريكي ما يقارب 25 بليون دولار أمريكي للاختبارات. وعلى الرغم من الدعم المادي الكبير وقيام الحكومة الأمريكية بدعم التصنيع المحلي، فلم تتمكن الحكومة الأمريكية من تفعيل برنامج الفحص الموسع بسبب عدم شمولية الخطة الوطنية لتوزيع أطقم الفحص و غياب التخطيط السليم. العجز في توفير بعض المؤن حدا بالممارسين الصحيين إلى طلبها عبر المتاجر الالكترونية، كما تطوعت دور الأزياء لخياطة الكمامات وأردية الحماية الشخصية. ونظرا لطبيعة النظام الفدرالي، فقد تفاوتت مواعد رفع حظر التجول بين الولايات. قامت هيئة الغذاء والدواء الأمريكية باعتبار دواء الهيدروكلوروكوين المضاد للملاريا كأحد الأدوية الفاعلة في معالجة المرضى المصابين بكوفيد-19 الأمر الذي استدعى إلى استيراد كميات كبيرة من الهند بأمر مباشر من الرئيس الأمريكي في إبريل 2020.

دعم المُمكنات:

دعمت الحكومة الأمريكية تفعيل عدد من التدابير الرقمية من خلال إنشاء لوحة تحكم كوفيد-19 والتطبيقات ذات العلاقة بالتقصي الوبائي للمخالطين وقد تم تفعيل تطبيقات التقصي الوبائي في 5 إبريل 2020 للتحكم في انتشار العدوى الفيروسية من خلال تحديد المخالطين للحالات المصابة لاحتواء الإصابات، ويُفيد التطبيق في تحديد المناطق الموبوءة جغرافيا. إضافة إلى ذلك، تم تفعيل تطبيق لمتابعة الوضع العالمي والداخلي لحالات كوفيد-19 بدعم من المركز الوطني للوقاية من الأمراض ومكافحتها.

الدعم الاقتصادي الحكومي:

تم اعتماد قانون المساعدة والإغاثة والأمن الاقتصادي المخصص لجائحة فيروس كورونا في 27 مارس 2020، بالتزامن مع اعتماد تقديم المعونات المالية لكافة المواطنين الأمريكيين وحاملي الإقامة الدائمة إضافة الى بعض المقيمين الذين يحملون فئات معينة من تأشيرات الدخول وفق شروط معينة. ومع اعتماد القانون، أعلنت الخزينة الأمريكية عن حزمة من القرارات لدعم الوظائف في القطاع الصناعي من خلال دعم أصحاب رؤوس الأموال الأمريكية لتقليل الحاجة إلى تقليص الموظفين عند استئناف العمل

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البرازيل:

تعد البرازيل خامس أكبر دولة من حيث المساحة وثامن أكبر اقتصاد على المستوى العالمي، وعلى الرغم من ذلك مازالت البرازيل تحاول النهوض من تبعات الكساد الاقتصادي الذي أصابها قبل خمس سنوات. سجلت البرازيل أول حالة إصابة بعدوى كوفيد-19 في 26 فبراير 2020 تبع ذلك تزايد مضطرد في عدد الحالات الأمر الذي تجاوز الطاقة الاستيعابية لأسرة وحدات العناية الفائقة ما شكل عبئا مضاعفا على النظام الصحي ونقصًا حادًا في المؤن الطبية خاصة مع حالة الشلل العام التي أصابت التجارة العالمية الأمر الذي أدى إلى ارتفاع معدل الوفيات. وقد أسهم العجز الكبير في الكادر الصحي وقلة المرافق الصحية في تضخيم الأثر الصحي والاقتصادي للأزمة. وقد حاولت الحكومة البرازيلية احتواء الأزمة من خلال تفعيل حزمة من الإجراءات وتشمل:

حظر التجول وتوفير المؤن:

في مارس 2020 قيدت السلطات البرازيلية الدخول إلى أراضيها باستثناء القادمين بشكل مؤقت للحاق برحلة أخرى، إضافة إلى الموظفين الأجانب الحاصلين على تصريح من الحكومة، وكذلك موظفي المنظمات الإنسانية. وقد تم تعليق حركة الملاحة الجوية حتى يوليه 2020. ومع فتح الحدود البرازيلية قامت السفارات البرازيلية بالموافقة على طلب إصدار التأشيرات ابتداءً من 22 يونيه 2020وشمل ذلك التأشيرات المقدمة لغرض العمل. وعلى الرغم من تعليق 90% من حركة الملاحة الجوية فقد تزايدت الحالات لتصل العدوى إلى كافة مناطق البلاد. وعلى الرغم من التزايد المضطرد في عدد الإصابات غير أن الحكومة البرازيلية لم تتخذ أي إجراءات للحد من انتشار العدوى خاصة مع تزامن التزايد في عدد الحالات مع فترة المهرجانات الوطنية وما يصحبها من تجمعات بشرية، بل إن الرئيس البرازيلي أصدر أوامره بإعفاء السلطات المحلية في المناطق في حال قامت بتطبيق أي إجراءات تهدف إلى تعزيز التباعد الاجتماعي أو الحد من التجمعات وغيرها من الإجراءات الاحترازية غير أن المحكمة العليا ما لبثت أن طعنت في صحة الأوامر ما أدى إلى إلغائها حفاظًا على صحة السكان. وقد أثرت الجائحة سلبًا على سلاسل إمداد المواد الغذائية ما فتح باب التكهنات عن الأمن الغذائي البرازيلي وقدرة السكان على الوصول إلى ما يكفي حاجتهم من الغذاء تزامن ذلك مع تسريح العديد من وظائفهم مما أضعف القوة الشرائية.

توفير الرعاية الصحية المطلوبة:

فشلت استراتيجية "مناعة القطيع" التي تبنتها الحكومة البرازيلية في مواجهة جائحة كوفيد-19، ومع تزايد عدد الحالات فقد واجه النظام الصحي البرازيلي عجزًا في الموارد البشرية والمؤن والأجهزة والمعدات إضافة إلى انتقال العدوى إلى الكادر الصحي ووفاتهم جراء الإصابة وعدم قدرة النظام الصحي على مواجهة الطلب المتزايد. ويرجع انهيار النظام الصحي البرازيلي وعدم قدرته على مواجهة الأعداد المتزايدة من الإصابات إلى التساهل في تطبيق الإجراءات الاحترازية. أدى ذلك إلى قيام أندية كرة القدم بالتعاون مع السلطات الصحية في البرازيل إلى تحويل ملاعبها إلى مستشفيات ميدانية في محاولة لتخفيف الضغط على النظام الصحي.

دعم المُمكنات:

أطلقت الحكومة البرازيلية في مارس 2020 نظام التقصي الوبائي، لمراقبة الوضع الوبائي في البلاد.

الدعم الاقتصادي الحكومي:

لمواجهة الأزمة الاقتصادية الناتجة عن جائحة كوفيد-19، أقرت الحكومة البرازيلية عددًا من التدابير المالية من خلال دعم الاقتصاد البرازيلي من البنك الوطني والبنك المركي بمبلغ قدره 150 بليون دولار أمريكي.

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المملكة العربية السعودية:

حسب التقرير الإحصائي لوزارة الصحة السعودية الصادر في 2019، فقد بلغ عدد المستشفيات السعودية 498، بمعدل سعة سريرية يبلغ 22,5 لكل 10 آلاف نسمة. وبلغت نسبة المستشفيات التابعة لوزارة الصحة 67% من مجموع المستشفيات في السعودية. وقد قامت الحكومة السعودية بتطبيق حزمة من الإجراءات الاحترازية على مرحلتين حتى قبل تسجيل أول حالة إصابة بعدوى كوفيد-19 في 2 مارس 2020. شملت المرحلة الأولى والتي بدأت في 27 يناير 2020 تشكيل اللجنة المعنية برئاسة وزارة الصحة وتضطلع بدراسة الوضع الوبائي واعتماد الأدلة والسياسات والإجراءات ذات العلاقة وذلك للتقليل من خطر انتشار العدوى، تبعًا لذلك تم تفعيل منصة القيادة والتحكم الوطنية لمراقبة كوفيد -19 في 1 فبراير 2020والتي تعنى بدراسة الوضع الوبائي والرفع بالتوصيات برئاسة معالي وزير الصحة، وشملت الإجراءات التي اتخذتها المملكة العربية السعودية للحد من انتشار العدوى والتقليل من أثر الجائحة ما يلي:

حظر التجول وتوفير المؤن:

في الثاني من شهر يوليو 2020، أصدر خادم الحرمين الشريفين الملك سلمان بن عبدالعزيز مرسومًا ملكيا يقضي باعتماد عدد من المبادرات للتقليل الأثر الاقتصادي للجائحة. وشملت المبادرات تمديد الإقامات والتأشيرات للمقيمين. كما تم تمديد الإقامات لمن يحملون تأشيرات خروج وعودة لمدة ثلاثة أشهر في حال انتهاء الإقامة خلال فترة حظر السفر. وتم تمديد تأشيرات الزيارة لمن قدموا للمملكة وعلقوا جراء قرارات حظر الملاحة الجوية على المستوى العالمي. وفي شهر إبريل 2020 أطلقت الحكومة السعودية تطبيق "عودة" لإجلاء المواطنين السعوديين بالخارج وتوفير رحلات جوية لإعادتهم إلى أرض الوطن، إضافة إلى تسيير رحلات للمقيمين الراغبين في العودة إلى أوطانهم في حال وافقت حكوماتهم على استقبال رحلات الطيران. وقد استفاد من الخدمة حالي 12789 مواطن تمكنوا من العودة رغمًا عن حالة تعليق الملاحة الجوية العالمية.

توفير الرعاية الصحية المطلوبة:

في شهر مارس 2020 صدر مرسوم ملكي بضمان حق العلاج المجاني لكافة المواطنين والمقيمين نظاميًا أو بشكل غير نظامي لكافة من يصاب بعدوى كوفيد-19. على إثر ذلك وفي ظهور إعلامي لمعالي وزير الصحة الدكتور توفيق الربيعة أكد أن حكومة المملكة العربية السعودية حريصة على تحقيق العدالة وتوفير الرعاية الصحية اللازمة لكافة المقيمين على أراضيها بغض النظر عن نظامية إقامتهم، وأن وزارة الصحة بالتعاون مع الجهات المعنية على أهبة الاستعداد لمواجهة الأزمة من خلال تجهيز المرافق الصحية بالمؤن اللازمة. قامت السلطات الصحية بالمملكة كذلك بإصدار عدد من الأدلة التوعوية المترجمة إلى اللغات الأجنبية لتتمكن من الوصول إلى أكبر شريحة من الجاليات المقيمة على أراضيها وذلك لتعزيز الوعي المجتمعي. تزامن ذلك مع المسح الموسع في منتصف شهر إبريل 2020في المناطق المكتظة بالسكان.

ولمواجهة الضغط المتزايد على المرافق الصحية قامت السلطات السعودية بإنشاء عدد من المستشفيات الميدانية لمعالجة الحالات البسيطة. وتم تجهيز المستشفيات الميدانية على أعلى مستوى وتم التنسيق لنقل المعدات والأجهزة وتوزيعها على مستشفيات وزارة الصحة حسب الاحتياج بعد الانتهاء من احتواء الجائحة وإغلاق المستشفيات الميدانية. وقد قامت وزارة الدفاع بمساندة وزارة الصحة من خلال تقديم الدعم اللوجستي لتشغيل المستشفيات الميدانية والاستفادة من خبرة وزارة الدفاع الطويلة في إدارة وتموين المستشفيات الميدانية. إضافة إلى ذلك حرصت السلطات الصحية السعودية على دعم برامج الصحة العقلية والنفسية المقدمة للمجتمع وذلك لمواجهة الضغط المتزايد نتيجة حظر التجول والقلق الناتج عن الجائحة. وقد استفادت السلطات الصحية السعودية من الخبرة التراكمية نتيجة مواجهة فيروس كورونا المسبب لمتلازمة الشرق الأوسط التنفسية من خلال إطلاق التطبيقات الالكترونية لدعم حملة الفحص الموسع ومراكز الفحص السريع.

دعم المُمكنات:

بالتعاون مع الهيئة السعودية للبيانات والذكاء الصناعي، أطلقت وزارة الصحة السعودية تطبيق تباعد والمعني بإطلاق التنبيهات في حال تواجد الشخص في أماكن بها إصابات وذلك للحد من المخالطة ومساندة عمليات التقصي الوبائي. كما قامت وزارة الصحة بتحديث تطبيق "موعد" لتمكين المواطنين والمقيمين من الاستفادة من التوجيهات ذات العلاقة بالعزل المنزلي، كما تم استخدام الأساور الالكترونية في عمليات التقصي الوبائي ومتابعة تحركات المرضى في العزل المنزلي تفاديًا لمخالفة إجراءات العزل القاضية بعدم مغادرة المنزل لحين الشفاء. كما تم تفعيل الوصفات الالكترونية والطب الاتصالي

الدعم الاقتصادي الحكومي:

دعمت الحكومة السعودية القطاع الخاص من خلال التزامها برواتب 60% من الموظفين السعوديين لمدة ثلاث أشهر وبمبلغ إجمالي يصل إلى 2,4 بليون دولار من خلال برنامج "ساند". وقد استفاد من الدعم الحكومي أكثر من 1,2 مليون موظف سعودي. الأمر الذي حد من خطر تسريح الموظفين السعوديين. وقد وجه خادم الحرمين الشريفين بتقديم تبرع قدره عشرة ملايين دولار لدعم جهود منظمة الصحة العالمية في مكافحة جائحة كوفيد-19، تلا ذلك إعلان المملكة في 18 سبتمبر 2020 التزامها بالتبرع بمبلغ 100 مليون دولار أمريكي لمساندة الأمم المتحدة والبرامج التابعة لها ومنظمة الصحة العالمية ضمن التحالف العالمي لمكافحة كوفيد-19وذلك لتقديم الدعم والمساندة الضرورية للدول الفقيرة. ولتقليل العبء الاقتصادي على القطاع الخاص فقد دعمت الحكومة السعودية القطاع الخاص بحزمة من القرارات وقد وصل مجموع الدعم المالي إلى 61 بليون دولار. وقد طبقت الحكومة السعودية إجراءات حظر التجول الكلي والجزئي بحسب المنحنى الوبائي لكل منطقة وجرى الرفع التدريجي وإعادة النشاط الاقتصادي مع الالتزام بتطبيق الإجراءات الاحترازية.

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تركيا:

منذ العام 2000 وتركيا تُظهر للعالم تقدما سريعا على الصعيد الاقتصادي والاجتماعي ما أدى إلى انخفاض معدلات البطالة وارتفاع مستوى الدخل. وقد سجلت تركيا أعلى مستوى لنمو الدخل الوطني على مستوى دول مجموعة العشرين في الربع الثاني من العام 2020. تزامن إعلان الجائحة مع افتتاح مستشفيين لغرض التعامل مع حالات عدوى كوفيد-19 بسعة سريرية تصل إلى 1008 سرير لكل منهما. وقد سجلت تركيا معدلات نمو اقتصادي جيد ما يبشر بقرب التعافي من الركود الاقتصادي. ولمواجهة الجائحة قامت تركيا بتطبيق حزمة من الإجراءات الاحترازية التي شملت:

حظر التجول وتوفير المؤن:

سجلت تركيا أول حالة للإصابة بكوفيد-19 في مارس 2020، على إثرذلك فعلت الحكومة التركية إجراءات التباعد الاجتماعي وحظر التجول. حيث قامت الحكومة بإغلاق المدارس والجامعات والمرافق العامة، كم تم منع تجول الكبار في السن ومرضى الأمراض المزمنة. إضافة إلى ذلك، فقد تم تحديد وقت إقامة المناسبات الاجتماعية في الشوارع بساعتين مع حظر تطبيق الأطعمة، كما ألزمت سائقي سيارات الأجرة بتركيب حواجز تفصل بينهم وبين الركاب. وقد حرصت الحكومة التركية ألا يؤثر الحد من الحركة في الطرقات العامة وقوانين حظر التجول على تأمين الأطعمة والمؤن الأساسية على مستوى الدولة. كما قامت بدعم المزارعين والمشاريع ذات العلاقة بتصنيع الطعام. كما دعمت الحكومة حملة لبيع الأسماك بسعر الجملة لتعزيز الأمن الغذائي للأسر. مع حلول 29 مايو 2020 تمكنت الحكومة التركية من إجلاء 75000 من مواطنيها وإعادتهم إلى الأراضي التركية وخضع العائدون للحجر الصحي لمدة 15 يوم. وبحسب وزارة الخارجية التركية فقد غادر الأراضي التركية حوالي 200 ألف أجنبي. وقد قامت السلطات بدعم قرارات تخفيض عدد العمالة الأجنبية في الأراضي التركية إضافة إلى دعم توظيف المواطنين.

توفير الرعاية الصحية المطلوبة:

تم بناء عدد من المستشفيات الميدانية على المداخل الحدودية بالتنسيق بين وزارة الصحة وفريق الإنقاذ الطبي الوطني وذلك للحد من انتشار العدوى في الأراضي التركية. وتم استخدام المستشفيات الميدانية كمحطة أولى لفرز حالات الاشتباه وعزل الحالات المصابة، والجدير بالذكر أن المستشفيات الميدانية زُودت بغرف عمليات لإجراء العمليات الجراحية غير المعقدة لتخفيف الضغط على المستشفيات الرئيسية، وكان نجاح تجربة المستشفيات الميدانية الحدودية محفزًا للتوسع في إنشاء المستشفيات الميدانية داخل المدن التركية بمساندة القطاع العسكري. كما تم إنشاء مستشفى متنقل بسعة 30 سرير إضافة إلى محطة إسعاف متنقل بسعة 38 حاوية و42 خيمة إيواء وتعمل على مدار الساعة.

قامت الحكومة التركية بتوزيع الكمامات على المواطنين والمقيمين على أراضيها بتنسيق مشترك بين وزارة الصحة التركية ووزارة النقل والبنى التحتية. كما يمكن للمواطنين التقدم بطلب الكمامات عن طريق الموقع الالكتروني لوزارة التجارة التركية بحيث يتم توفير خمسة كمامات مجانية أسبوعيا حيث أصدرت الحكومة التركية قرارًا بمنع بيع الكمامات وتصديرها وذلك منعًا للاحتكار ورفع الأسعار على الرغم من أن تركيا تعتبر أحد أهم مصدري أدوات الحماية الشخصية. ودعمت وزارة الصحة التركية توفير كافة الأدوات بشكل مجاني. ومع ارتفاع الحالات الحالات قامت المستشفيات بالتغييرات اللازمة لرفع السعة السريرية من غرف العزل ذات الضغط السالب.

دعم المُمكنات:

قامت وزارة الصحة التركية بالتنسيق مع عدد من شركات الاتصالات لتدشين تطبيق لمساندة التقصي الوبائي ومتابعة تحركات المرضى. إذ تم إلزام كافة المرضى باستخدام التطبيق، إذ يقوم التطبيق بإرسال رسائل تحذيرية في حال غادر المرضى أو المعزولون منزليا نطاق العزل المخصص من خلال متابعة التحركات على النطاق الجغرافي. كما يقوم التطبيق بمتابعة التحركات بين المدن ويوفر معلومات عن المناطق الموبوءة ومعدلات انتشار الوباء. كما قامت الحكومة التركية بتفعيل خدمة الجواز الصحي للمواطنين الراغبين في السفر داخليا بالطائرات أو القطارات.

الدعم الاقتصادي الحكومي:

كان للحجر الصحي المفروض عالميًا أثره السيء على الوضع الاقتصادي التركي، الأمر الذي دفع بالحكومة التركية إلى تفعيل حزمة من الإجراءات لتقليل الأثر الاقتصادي وذلك من خلال تأجير تحصيل القروض التجاري وتوفير الدعم المالي للمنشآت المتأثرة جراء الجائحة وتقليل ضريبة القيمة المضافة المفروضة على تذاكر الرحلات الداخلية كما تم إلغاء الضريبة المفروضة على المساكن حتى شهر نوفمبر 2020، كما تم تأخير استقطاع أقساط الضمان الاجتماعي للأعمال التجارية لمدة ستة أشهر. واعتمدت الحكومة التركية قانونًا يقضي بمنع تسريح الموظفين إلا لأسباب أخلاقية أو ذات علاقة بخيانة الأمانة، إضافة إلى ذلك تم تقديم الدعم المادي لمن فقدوا أعمالهم. إضافة إلى

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دور الحكومات في دعم المواطنين والمقيمين خلال جائحة كوڤيد-١٩: تجربة البرازيل، المملكة العربية السعودية، تركيا، الولايات المتحدة الاميركية نموذجًا

الولايات المتحدة الأمريكية:

سُجلت أول حالة لكوفيد-19 في الولايات المتحدة الأمريكية في تاريخ 20 ينـاير 2020 في ولاية واشنطن وكان المريض قد وصل من ووهان الصينية في 15 يناير 2020. عـلى إثر ذلك قامت الحكومة الأمريكية بتفعيل الإجراءات الرامية إلى احتـواء الأزمـة. في الخامس من سبتمبر لنفس العام وصل المعدل التراكمي للحالات المُشخصة مخبريا إلى 166,9 لكل 100ألف نسمة. الأمر الذي دفع بالحكومة الأمريكية إلى تفعيل الـعـمـل بالإجراءات الاحترازية والتي شملت:

تعليق حركة الملاحة الجوية:

علقت الحكومة الأمريكية دخول المسافرين القادمين من الصين أو من دول أخرى في حال مرورهم على الصين في 31 يناير 2021 وعلى إثر ذلك قامت شركات خطوط الطيران الأمريكية بتعليق رحلاتها إلى الصين. ونتج عن إعلان منظمة الصحة العالمية حالة الطوارىء العالمية نتيجة جائحة كوفيد-19 تعليق الرحلات من وإلى دول الاتحاد الأوروبي خاصة بعد تزايد حالات الاشتباه بين المسافرين القادمين من دول الاتحاد الأوربي.

وزارة الخارجية الأمريكية قامت بتنسيق إجلاء 101386 مواطن أمريكي من 136 دولة خلال الفترة بين 27 يناير و 10 يونيه 2020 من خلال تضافر الجهود بين سفارات الولايات المتحدة في الدول المختلفة مع وزارة الخراجية لتنسيق عمليات الإجلاء وحجز الطائرات والتنسيق مع السلطات المحلية بالمطارات. إضافة إلى ذلك، قامت الولايات المتحدة الأمريكية بتعليق كافة إجراءات طلبات الهجرة، كما علقت إصدار الإقامات الدائمة بشكل مؤقت، كما تم ترحيل المهاجرين غير الشرعيين إلى دولهم.

توفير الرعاية الصحية المطلوبة:

أعلنت الحكومة الأمريكية عن تخصيص ميزانية مفتوحة لتمكين المرافق الصحية من تقديم الرعاية الصحية اللازمة للمرضى الغير مؤمنين، كما تم تخصيص عيادات لتقديم الرعاية الصحية اللازمة لمرضى كوفيد-19 في المناطق النائية والقرى. تزامن التزايد المضطرد في عدد الحالات المسجلة لكوفيد-19 مع نقص حاد في الأسرة في بعض الولايات الأمر الذي تطلب خروج الحالات المنومة غير الحرجة و توسيع الطاقة السريرية للمرافق الصحية المحلية وذلك بإعادة فتح المرافق التي تم إغلاقها سابقا. وقام فيلق المهندسين بالجيش بالتعاقد مع شركات خاصة لتحويل مراكز المؤتمرات إلى مستشفيات ميدانية لسد العجز في السعة السريرية.

نظرا لتزايد الحاجة إلى المواد المطلوبة لإجراء الفحوص المخبرية، خصص الرئيس الأمريكي ما يقارب 25 بليون دولار أمريكي للاختبارات. وعلى الرغم من الدعم المادي الكبير وقيام الحكومة الأمريكية بدعم التصنيع المحلي، فلم تتمكن الحكومة الأمريكية من تفعيل برنامج الفحص الموسع بسبب عدم شمولية الخطة الوطنية لتوزيع أطقم الفحص و غياب التخطيط السليم. العجز في توفير بعض المؤن حدا بالممارسين الصحيين إلى طلبها عبر المتاجر الالكترونية، كما تطوعت دور الأزياء لخياطة الكمامات وأردية الحماية الشخصية. ونظرا لطبيعة النظام الفدرالي، فقد تفاوتت مواعد رفع حظر التجول بين الولايات. قامت هيئة الغذاء والدواء الأمريكية باعتبار دواء الهيدروكلوروكوين المضاد للملاريا كأحد الأدوية الفاعلة في معالجة المرضى المصابين بكوفيد-19 الأمر الذي استدعى إلى استيراد كميات كبيرة من الهند بأمر مباشر من الرئيس الأمريكي في إبريل 2020.

دعم المُمكنات:

دعمت الحكومة الأمريكية تفعيل عدد من التدابير الرقمية من خلال إنشاء لوحة تحكم كوفيد-19 والتطبيقات ذات العلاقة بالتقصي الوبائي للمخالطين وقد تم تفعيل تطبيقات التقصي الوبائي في 5 إبريل 2020 للتحكم في انتشار العدوى الفيروسية من خلال تحديد المخالطين للحالات المصابة لاحتواء الإصابات، ويُفيد التطبيق في تحديد المناطق الموبوءة جغرافيا. إضافة إلى ذلك، تم تفعيل تطبيق لمتابعة الوضع العالمي والداخلي لحالات كوفيد-19 بدعم من المركز الوطني للوقاية من الأمراض ومكافحتها.

الدعم الاقتصادي الحكومي:

تم اعتماد قانون المساعدة والإغاثة والأمن الاقتصادي المخصص لجائحة فيروس كورونا في 27 مارس 2020، بالتزامن مع اعتماد تقديم المعونات المالية لكافة المواطنين الأمريكيين وحاملي الإقامة الدائمة إضافة الى بعض المقيمين الذين يحملون فئات معينة من تأشيرات الدخول وفق شروط معينة. ومع اعتماد القانون، أعلنت الخزينة الأمريكية عن حزمة من القرارات لدعم الوظائف في القطاع الصناعي من خلال دعم أصحاب رؤوس الأموال الأمريكية لتقليل الحاجة إلى تقليص الموظفين عند استئناف العمل.

Top Twenty Reported Diseases by Regions, Kingdom of Saudi Arabia, Q3 (Jul-Sep) 2020

Diseases	Riyadh	Makkah	Jeddah	Taif	Madinah	Qassim	Eastern	Ahsa	Hafr Al-Batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gonfuda	Total
Hepatitis B	205	91	166	52	65	18	103	22	1	34	3	32	2	6	43	17	13			9	882
Brucellosis	112	22	20	44	26	27	53	8	14	11	34	4	38	2		38	3	6	1	4	467
Pulmonary Tuberculosis	134	48	61	13	24	2	37	5	3	13		8	7	4	87	1	2		2	4	455
Salmonella infection	170	14	95	1	15		98	27				1				4	1				426
Hepatitis C	125	61	57	25	15	10	59	10	1	11	1	12	1	4	6	6	12	1		4	421
VHF - Dengue fever	1	1	363													1					366
Amoebiasis	18	1	54	32		4	209	23					1								342
Extra-Pulmonary Tuberculosis	57	9	20	2	6		12	5		5		2			20	1		1			140
Scorpion sting	13			71		24	2					1				11					122
Animal Bite	6		2	7		57	21	3				2				11					109
Chicken pox	18	1	6	12	1	12	34	2		4	2	2	3	1		3	1				102
Malaria	8	6	13	4	1	2	17	2		11	8				14	1	1				88
Typhoid / paratyphoid fever	66		3		2		5	1		1						9					87
Leishmaniasis Cutaneous					9	32	3	2			4	23				1	1				75
Scabies	1		7	3	6	1	43	4				3			2			1			71
Mumps	11		4	4		1	5									7			1		33
VHF - Dengue (severe) fever			25																		25
Meningitis - Other	17		2	2			1														22
Hepatitis A	10	1	6	1			1	2													21

* Include symptomatic and asymptomatic all positive cases

Top Twenty Reported Diseases by Gender, Age and Nationality, Kingdom of Saudi Arabia, Q3 (Jul-Sep) 2020

Diseases	Gender		Age Groups (Years)					Nationality	
	Male	Female	0-4	5-14	15-29	30-59	60 & above	Saudi	Non-Saudi
Hepatitis B	522	360	5	5	85	622	164	650	221
Brucellosis	369	98	14	47	110	230	66	303	158
Pulmonary Tuberculosis	316	139	8	6	149	239	52	181	269
Salmonella infection	230	196	206	61	34	84	40	307	113
Hepatitis C	238	183		1	43	253	124	284	129
VHF - Dengue fever	293	73	6	11	114	214	19	172	194
Amoebiasis	231	111	56	31	75	160	19	200	120
Extra-Pulmonary Tuberculosis	94	46	7	5	48	64	16	62	78
Scorpion sting	87	35	8	19	38	50	7	91	30
Animal Bite	90	19	5	16	35	49	4	56	49
Chicken pox	55	47	17	24	34	20	7	67	34
Malaria	84	4	1	5	31	48	3	21	65
Typhoid AND/OR paratyphoid fever	73	14	1		17	66	3	17	68
Leishmaniasis Cutaneous	58	17	7	13	20	32	3	51	22
Scabies	50	21	11	13	15	31	1	33	34
Mumps	19	14	25	5	1	2		27	5
VHF - Dengue (severe) fever	22	3			12	12	1	13	12
Meningitis - Other	7	15	11	4	2	4	1	17	4
Hepatitis A	12	9	0	1	9	10	1	18	3

Top Twenty Reported Diseases, National Surveillance data and Trend, Kingdom of Saudi Arabia, Q3 (Jul-Sep) 2020

Diseases	Current Year 2020			Previous Year 2019		
	Quarter-3 Jul-Sep 2020	Cumulative total since 1st January	Current rate*	Quarter-1 Jul-Sep 2019	Cumulative total since 1st January	Previous rate*
Hepatitis B	882	2879	8.18	1576	5120	14.9
Brucellosis	467	1863	5.3	1080	3421	9.96
Pulmonary Tuberculosis	455	1473	4.19	711	2160	6.29
Salmonella infection	426	1010	2.87	837	1869	5.44
Hepatitis C	421	1330	3.78	670	2400	6.99
VHF - Dengue fever	366	1263	3.59	329	2048	5.96
Amoebiasis	342	1125	3.2	874	2713	7.9
Extra-Pulmonary Tuberculosis	140	425	1.21	219	704	2.05
Scorpion sting	122	259	0.74	2	6	0.02
Animal Bite	109	473	1.34	296	881	2.56
Chicken pox	102	1430	4.06	719	2741	7.98
Malaria	88	1103	3.14	434	1074	3.13
Typhoid AND/OR paratyphoid fever	87	241	0.69	97	400	1.16
Leishmaniasis Cutaneous	75	394	1.12	103	458	1.33
Scabies	71	567	1.61	312	1466	4.27
Mumps	33	112	0.32	48	138	0.4
VHF - Dengue (severe) fever	25	185	0.53	40	1129	3.29
Meningitis - Other	22	83	0.24	49	158	0.46
Hepatitis A	21	64	0.18	95	199	0.58

* Rate per 100,000 Population

All above three tables are based on the HESN Data, Provided by Surveillance and Data Management unit, Ministry of Health Kingdom of Saudi Arabia

Data contained within these tables are based on available information extracted from HESN database by the time of publishing of the bulletin Issue. Please note that Covid-19 is excluded from the Top twenty diseases list.

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Top Twenty Reported Diseases by Regions, Kingdom of Saudi Arabia, Q4 (Oct-Dec) 2020

Diseases	Riyadh	Makkah	Jeddah	Taif	Madinah	Qassim	Eastern	Ahsa	Hafr Al-Batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gonfuda	Total
Hepatitis B	290	122	174	67	63	14	161	34	5	41	7	115	6	13	187	38	21	3		14	1375
Pulmonary Tuberculosis	186	41	92	10	24	6	61	17	5	21		10	3	3	141	7	3		1	5	636
Hepatitis C	169	62	93	45	25	22	92	7	2	36	4	21	8		15	11	10	1		4	627
Amoebiasis	40	1	124	42		1	218	31								10					467
Salmonella infection	147	15	118	2	4		114	28	1	4					2	2	3				440
Brucellosis	65	49	34	72	15	39	38	2	5	14	42	3	27	2		26	3	2		1	439
Malaria	28	10	52	14	6	7	44	10	1	31	6		1	1	148	3	4	2		3	371
Animal Bite	25	6	4	15		154	29					4			2	4					243
Chicken pox	44	2	6	12	1	24	53	5	1	3	1	4	3	13	5	17	1		3		198
Extra-Pulmonary Tuberculosis	54	8	28	2	12	2	29	5	2	10		2	3		24	2					183
Leishmaniasis Cutaneous	8		3		5	28	9	46		5	2	28	7			2	8				151
VHF - Dengue fever	2	2	98		3										1	3					109
Scabies	3	7	13	3	6		43	6	1	3		6			2	1	2				96
Scorpion sting	16	8	39	17		13	1														94
Typhoid / paratyphoid fever	11		2		3		17	3	1			1				8					46
Influenza (Seasonal)	9		7				1	1							21						39
Mumps	6	2	8	3	1		9	2				1	1	5					1		39
Hepatitis A	12	4	8		2	1	3	2													32
Meningitis - Other	16		3				3	1										1			24

* Include symptomatic and asymptomatic all positive cases

Top Twenty Reported Diseases by Gender, Age and Nationality, Kingdom of Saudi Arabia, Q4 (Oct-Dec) 2020

Diseases	Gender		Age Groups (Years)					Nationality	
	Male	Female	0-4	5-14	15-29	30-59	60 & above	Saudi	Non-Saudi
Hepatitis B	875	498	6	11	93	980	284	1079	282
Pulmonary Tuberculosis	442	193	18	11	229	320	58	217	409
Hepatitis C	358	269	3	4	74	339	207	453	166
Amoebiasis	294	173	95	63	102	180	26	238	220
Salmonella infection	229	211	233	49	32	84	42	331	102
Brucellosis	336	103	16	56	82	223	62	314	116
Malaria	329	41	9	18	137	196	11	82	283
Animal Bite	185	57	14	42	66	111	10	136	95
Chicken pox	125	73	33	31	77	50	7	121	74
Extra-Pulmonary Tuberculosis	120	63	4	9	57	93	20	92	87
Leishmaniasis Cutaneous	129	22	2	19	29	92	9	77	71
VHF - Dengue fever	86	23	3	1	30	65	10	34	74
Scabies	63	33	5	17	18	51	5	59	34
Scorpion sting	65	29	7	11	28	37	11	74	16
Typhoid AND/OR paratyphoid fever	26	20	10	3	12	19	2	19	27
Influenza (Seasonal)	22	17	13	3	5	9	9	26	13
Mumps	25	14	34	2	1	2		35	4
Hepatitis A	14	18	3	2	11	13	3	24	8
Meningitis - Other	11	13	8	3	2	9	2	19	5

Top Twenty Reported Diseases, National Surveillance data and Trend, Kingdom of Saudi Arabia, Q4 (Oct-Dec) 2020

Diseases	Current Year 2020			Previous Year 2019		
	Quarter-4 Oct-Dec 2020	Cumulative total since 1st January	Current rate*	Quarter-4 Oct-Dec 2019	Cumulative total since 1st January	Previous rate*
Hepatitis B	1375	4254	12.02	1706	6826	19.75
Pulmonary Tuberculosis	636	2109	5.96	718	2878	8.33
Hepatitis C	627	1957	5.53	1015	3415	9.88
Amoebiasis	467	1592	4.5	630	3343	9.67
Salmonella infection	440	1450	4.1	696	2565	7.42
Brucellosis	439	2302	6.51	844	4265	12.34
Malaria	371	1474	4.17	528	1602	4.64
Animal Bite	243	716	2.02	280	1161	3.36
Chicken pox	198	1628	4.6	929	3670	10.62
Extra-Pulmonary Tuberculosis	183	608	1.72	233	937	2.71
Leishmaniasis Cutaneous	151	545	1.54	143	601	1.74
VHF - Dengue fever	109	1372	3.88	476	2524	7.3
Scabies	96	663	1.87	390	1856	5.37
Scorpion sting	94	353	1	4	10	0.03
Typhoid AND/OR paratyphoid fever	46	287	0.81	202	602	1.74
Influenza (Seasonal)	39	2331	6.59	4418	9890	28.62
Mumps	39	151	0.43	67	205	0.59
Hepatitis A	32	96	0.27	56	255	0.74
Meningitis - Other	24	107	0.3	62	220	0.64

* Rate per 100,000 Population

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وزارة الصحة
Ministry of Health

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