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How did Jordan combat COVID-19: Lessons learned for scaling

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Jordan is a developing country and it counts 106 private and public hospitals with 12,081 hospital beds. This makes the hospital bed rate about 18 for every 10,000 patients, which is lower than the global rate. As of 2013, 44% of the health care workforce consisted of nurses and 25% consisted of physicians; 44% of all workers in the health care sector are women (https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world).1

When the COVID-19 virus emerged in early 2020, Jordan’s response was unique, and the measures undertaken in terms of severity and urgency served to ensure a slower spread and lower mortality rates. Here, we summarize and discuss a list of practical measures implemented by the government.

Measures and policies

The initial lockdown rules in Jordan were very different from the majority of other nations. A curfew was established, and nobody could leave home except medical staff, security forces, and providers of essential services such as food and fuel delivery, which did not experience any shortage. The police implemented mandatory wearing of masks and gloves and 2-m social distancing in public spaces.

Some private and public sector hospitals were designated for COVID patients, and no visitors were permitted at these facilities. Factories started to manufacture masks and disinfectants: essential medicines and food were delivered to doorsteps, mainly for senior citizens. By taking nasopharyngeal swabs, PCR COVID-19 sampling was performed door-to-door by either the ministry of the health task force or private laboratories at a very affordable cost.

These regulations and policies were implemented efficiently and were accepted with a high uptake by the entire population.

The government established expert task forces for health, education, social development, security, and technology to develop contingency, action, and execution plans to ensure continuity.

Health-related measures

Within the first week of coronavirus spreading in Jordan, suspicious cases were isolated at government expense in many hotels across the country. When the number of confirmed cases of COVID-19 reached 40, the government implemented new measures and a stricter curfew, and the government forbade more than 10 people from meeting and blocked travel between the governorates. Surgeries, surgical exams except in emergencies and operations were all halted. Only essential utilities, pharmacies, and food suppliers were allowed to function. The printing of paper newspapers was stopped because of the possibility of increased exposure to the virus. Public transit and transport were halted. Malls and shopping centers were closed. The Jordanian government had also set up quarantine camps for those arriving from other countries and tightened control and preventive measures at all borders, including installing thermal scanners. Jordan also temporarily banned travelers from China, South Korea, and Iran due to the increasing number of infection cases in those countries. Mandatory chest, throat, and temperature checks were carried out for all arrivals at Jordanian border crossings and airports, and 14-day quarantine orders were issued for suspected cases. The export or sale of medical masks to third parties was banned, and their production was increased. Awareness-raising campaigns were intensified to prevent the spread of the disease, hospital beds were increased, and travel cancelled. Contact tracing was carried out using a local mobile application, “Aman App,” and an online platform for registering citizens and non-citizens for the vaccine was set up. Security-related measures were implemented to enforce travel restrictions and stricter punishments for violators.

Education-related measures

The government suspended operations at all educational institutions. Educational lectures were broadcast from radio and television stations. In addition, a learning platform for students and teachers developed by the ministry of education and UNICEF was made available to students. Forty days after these strict measures were put in place, there were signs of contraction of the pandemic, and government restrictions were reduced.

Social development-related measures

Most commercial and economic sectors were allowed to resume in-person

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https://doi.org/10.1016/j.medj.2021.03.016
operations with restrictions, and mobility was increased at the end of April, with further easing of restrictions in June. Since November, the government has restricted movement by implementing curfew at night and Fridays and closing all sports facilities; however, this restriction eased by February 1, allowing sports facilities to be open and lifting Friday curfew (https://www.jordantimes.com/news/local/financial-education-added-curricula-3387-private-public-schools). Unfortunately, the number of cases in Jordan significantly increased last autumn and reached one of the highest rates worldwide due to uncontrolled restrictions at the passengers’ gate between Jordan and Saudi Arabia.

Economy-related measures
Economic measures were introduced and included financial compensation for daily workers. The Central Bank of Jordan (CBJ) played a crucial role in containing the negative repercussions of COVID-19 on individuals and businesses and major efforts to stabilize the economy and the financial sector during the spread of the virus. In March, it announced a package of key measures to contain the pandemic’s impact on the economy and ease its effects on individuals, including the postponement of loan repayments.

The role of civic society
The Jordanian civic society responded by committing their expertise, time, and experience to curtail the pandemic and support the government to protect the people.

Jordan switched to a distance learning model. Given the increased need for reliable internet access, major telecom companies enabled free browsing on official distance learning platforms, providing around 2 million students with free access to educational content.

Once lockdown restrictions were eased, older individuals (65 and above) and those with disabilities found it difficult to access groceries or pharmacies. Solutions developed by neighborhood communities ensured that individuals had access to food or medicine while reducing the number of individual trips

Universities researchers are working to develop better testing and medical equipment. Local scientists and researchers at German Jordanian University and Jordan University of Science and Technology developed a local cost-effective RNA extraction kit that circumvents reagents supply issues.

Direct impact on COVID
As a result of all these measures, the cumulative number of COVID-19 cases in Jordan during the first stage of the pandemic were 1133 infected, 9 deaths, and 238 active cases. As of January 21, 2021, a total of 317,405 infected cases, 4187 deaths, and 10,110 active cases have been recorded (Worldometer).

Conclusion
In the first phase of the pandemic, Jordan successfully maintained a low number of COVID-19 cases and low mortality rates while maintaining social order.

Although Jordan has limited resources, the government announced a nationwide vaccine for Jordanians, expat residents, and refugees free of charge with very organized criteria based on profession, age, and health status. Like many other countries, Jordan has a contract with three major vaccine producer companies besides the country membership in International COVAX. Jordan is among the world’s first 40 countries to start a comprehensive vaccination program for all refugees in multiple camps around Jordan. Jordan’s experience demonstrates that rapid action by the government, together with strong social support and community-led innovation, was able to manage the first wave of the pandemic successfully.

DECLARATION OF INTEREST
The co-author Rana Dajani is a member of the scientific advisory board for the Cell Press medical and translational journal, Med.

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