Commentary

Can developing countries face novel coronavirus outbreak alone? The Iraqi situation

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ABSTRACT

Iraq is one of seven Arabic countries (Lebanon, Bahrain, Kuwait, Oman, Qatar and Saudi Arabia) that acquired novel coronavirus-19 disease (COVID-19) via people who have visited Iran recently. Iraqi outdated public healthcare settings are already overwhelmed with many acute injuries from ongoing unrest. Iraq faces six challenges in controlling COVID-19 [1]: A shortage in number of quarantine facilities [2], the availability of the testing which is limited to one governmental lab only in Baghdad [3], a shortage in personal protective equipment (PPE) and ambulances [4], a low level of public awareness [5], a shortage in hygiene preparations and [6] a high rate of antibiotic resistance in case of secondary bacterial infection. Thus, Iraq alone cannot control such a rapidly emerging outbreak and needs help from the international community and the World Health Organization (WHO) to prepare additional medical labs, establish high standard quarantine facilities and provide medical equipment for healthcare professionals. On its side, Iraq needs to impose more restrictions on travel from countries with a COVID-19 outbreak as other countries have done.

On March 12, the WHO officially declared the COVID-19 outbreak a pandemic [1]. By the end of March 13, the COVID-19 is confirmed in 139 countries. Globally, there are a total of 145,369 cases with 5429 total deaths [2].

Iraq, along with other six Arabic countries (Lebanon, Bahrain, Kuwait, Oman, Qatar and Saudi Arabia) obtained COVID-19 mainly via people who have visited Iran. The first case of COVID-19 in Iraq was detected on Feb 24, 2020 in Al-Najaf city, south of Baghdad. By the end of March 13, 2020, the Iraqi Ministry of Health (MOH) announced that 101 confirmed cases of COVID-19 [2] and nine deaths had been recorded in 14 out of 18 Iraqi governorates. Baghdad, the capital of Iraq, reported the largest share (about 40%) of cases. This may indicate a rapid spreading of COVID-19 across Iraq. Thousands of Iraqis visited Iran during the current spring break which made them vulnerable to COVID-19. Unfortunately, returning Iraqis brought the infection through their cities when they came back home because there is no obligatory quarantine for those thousands of potentially infected people. This challenge raises an important question; is Iraq well prepared to control such a vicious viral infection? The simple answer is probably not without international support since huge organized efforts and resources (which Iraq does not have) are needed to treat infected people and prevent the spread of the outbreak.

To reduce the risk of COVID-19 transmission, the World Health Organization (WHO) recommends that all people with a suspected or confirmed infection should be given a facemask and placed in a quarantine room [3]. Iraqis may face many challenges in this regard. Firstly, the Iraqi MOH may not have the infrastructure to deal with this outbreak since public (government) healthcare settings are already overwhelmed dealing with many injured people from the ongoing unrest since October 1st, 2019. Moreover, public hospitals have low bed capacity and there is an unequal distribution of hospitals across the different governorates and between rural and urban populations [4]. This means that the Iraqi public healthcare sector has a shortage in the number of quarantine facilities. The current official policy is self-quarantine of thousands of Iraqi travelers returning from Iran in their homes since there are not enough quarantine facilities that can accommodate such a large number of people. Currently, Iraqi airports and borders have a healthcare team that checks the body temperature of returning travelers. However, these policies seem ineffective in preventing COVID-19 cases from entering the country. Hence, there is a necessity to establish a larger number of quarantine facilities for people coming from countries affected by the COVID-19 epidemic such as Iran which is the outbreak focus in the Middle East currently. By the end of March 13, 2020, Iran has the third...
highest number of confirmed cases (11,364) of COVID-19 with third highest number of deaths (514) due to the viral infection in the world (after China and Italy) [2]. In addition, more rigorous strategies are required to stop people with potential COVID-19 infection entering including closure the borders and stop travelling from and to Iran.

According to the WHO, COVID-19 is suspected in any patient with severe acute respiratory symptoms (fever, cough, and shortness of breath), with a history of travel to endemic areas of COVID-19 (e.g. China or Iran) or contact with an infected person during the last 14 days [3]. Potential cases can be confirmed through the testing of specimens from both upper and lower respiratory tracts using reverse transcriptase polymerase chain reaction (RT-PCR).

The second challenge facing Iraqis is the limited availability of COVID-19 tests which currently are only available in the Central Lab in Baghdad. Thus, other provinces need to send specimens from suspected cases to Baghdad to confirm an infection which may take up to 24 h. In this regard, primary healthcare settings, especially in rural areas, lack specialized personnel and equipment to obtain and handle such hazardous specimens [5]. Therefore, they refer all suspected cases to large teaching hospitals that are mainly found in Baghdad [4]. Unfortunately, there is no specific protocol for referral of potential cases, and the patient is not obliged to visit specialized centers. This may increase the chance of undiagnosed COVID-19 cases. In addition, there is a limited number of ambulances equipped with trained staff and required personal protective equipment (PPE) available to transfer potential infected patients from home to hospital. Thus, if a person with suspected symptoms of COVID-19 decides to visit a specialized hospital, there is a high risk of transmitting the infection to other people during the journey to hospital. This problem could be addressed by training practitioners in primary healthcare settings to collect and send specimen to the Central lab in Baghdad, while quarantining potential cases in isolated rooms. Moreover, more equipped ambulances are needed to transfer potential cases rather than using public or private modes of transportation.

To protect healthcare workers inside a quarantine room, the WHO recommends the use of personal protective equipment (PPE) including facemasks, gloves, goggles/face shields, and gowns in addition to disposable equipment if possible (e.g. stethoscopes, blood pressure cuffs and thermometers) [3]. Unfortunately, the inadequate quantity of PPE is another (third) challenge which may impact both public (governmental hospitals) and private (clinics and community pharmacies) healthcare settings [6]. This PPE shortage has forced healthcare professionals to purchase PPE from the private market; such an increase in demand and shortage of supply of PPE are causing a rapid increase in costs. The provision of these essential PPE is a real challenge facing Iraqi healthcare officials.

The fourth challenge is the low level of awareness in Iraqi society regarding disease prevention such as avoiding crowded places and shaking hands. Additionally, the public’s unawareness regarding the infection symptoms may lead to many undiagnosed cases. Fifth, community pharmacies have a shortage of facemasks and simple hygiene preparations such as hand sanitizers and disinfectants. These problems should have been solved earlier by providing all healthcare settings with enough stock of PPE and public education about preventive measures. Additionally, awareness programs about essential preventive measures such as hand hygiene are necessary and should be provided to the public through TV programs and media.

The last challenge facing Iraqi healthcare system during the COVID-19 epidemic is that many infected patients may develop secondary bacterial infections like pneumonia and sepsis. These secondary bacterial infections require effective empirical antibiotic therapy which may be problematic because of antibiotic resistance [7]. However, one piece of good news is the viability of corona viruses in previous epidemic infections appears to rapidly decline when the ambient temperature exceeds 38 °Celsius [8]. These temperatures are common in May which may limit the duration of the epidemic in Iraq.

Currently, Iraqi people are very concerned with the daily increases in number of new confirmed cases. Their main concern is that the Iraqi healthcare system is unequipped to face and control such a rapid spreading viral infections due to the outdated and limited medical facilities and resources. Iraq may share the same challenges with other developing countries that do not have solid healthcare infrastructures. Finally, in order to control the COVID-19 outbreak, Iraq needs the help of the international community and the World Health Organization (WHO) to help equip more specialist medical labs, develop high standard quarantine facilities and provide sufficient PPE and medical training for healthcare professionals.

Declaration of competing interest

The authors have no competing interests to declare.

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