

Escalating the 2022 Hajj during the third year of the COVID-19 pandemic

Jaffar A. Al-Tawfiq, MD, FRCP(London)^{1,2,3} and Rana F Kattan^{4,5}, MD, Ziad A. Memish, MD, FRCPC^{6,7}

¹ Infectious Disease Unit, Specialty Internal Medicine, Johns Hopkins Aramco Healthcare, Dhahran, Saudi Arabia, ²Indiana University School of Medicine, Indianapolis, IN (USA)², and ³Johns Hopkins University, Baltimore, MD (USA); ⁴Pediatric Department, King Abdullah Specialist Children's Hospital(KASH); ⁵King Saud Bin Abdulaziz University for -Health Sciences ⁶King Saud Medical City, Ministry of Health, Riyadh, Saudi Arabia; Al-Faisal University, Riyadh, Saudi Arabia; ⁷Hubert Department of Global Health, Rollins School of Public Health, Emory University, Atlanta, GA, USA.

Key words: Mass Gatherings religious events, Hajj; Umrah; COVID-19; SARS-CoV-2, COVID-19, restrictions, Scaleup

Correspondence: Professor Ziad A Memish; Email: zmemish@yahoo.com

'Highlight' section

The escalation of the number of pilgrims for the 2022 Hajj season comes as KSA had succeeded in reaching an excellent percentage in vaccine coverage and subsequently eased the restrictions. KSA adopted an extensive surveillance, implemented risk mitigation, and maximized COVID-19 vaccines coverage.

Mass gathering events (MGs) indicates the presence of >1,000 people at the same time and place or when a large number of people gather at the same time and place resulting in significant burden on the public health infrastructure of the host country. The annual Hajj pilgrimage is one

of the most studied MGs and the annual Hajj and Umrah pilgrimage exceeds ten million pilgrims from around the globe.¹ The annual Hajj takes place at a fixed time each year depending on the lunar calendar from the 8th to 13th of Dhul Hijjah, the last month of the Islamic calendar.¹ Umrah can be performed at any time during the year and reaches a peak in attendance at the fasting month of Ramadhan.¹

One of the most feared communicable diseases that may occur during MGs is respiratory tract infections. Such infections may lead to significant outbreaks due to overcrowding and being in very close proximity to each other during performance of the Hajj religious rituals or during stay in shared accommodation in tents during their stay in Mina. The emergence of the severe acute respiratory syndrome coronavirus-1 (SARS-CoV-1) in 2002 and of the Middle East Respiratory Syndrome coronavirus (MERS-CoV) in 2012 had attracted lots of public health attention, and fortunately these two viruses did not cause outbreaks during the Hajj.² The emergence of SARS-CoV-2 late 2019 in Wuhan, China and subsequent international spread causing a global pandemic caused a significant disruption of international travel leading to postponement and cancellations of major MGs. Over the preceding 28 months since the start of the COVID-19 pandemic, the pandemic has led to postponement of the 2020 Olympic Games³ and had a major impact on the Umrah seasons and annual Hajj.⁴ The Kingdom of Saudi Arabia (KSA) reported its first case of SARS-CoV-2 in a returning traveler in March 2020⁵ and hence cancelled the Umrah on March 3, 2020,⁶ closed the two Grand Mosque in Makkah and Madinah and suspended Jumah prayers on March 17, 2020.⁴

On June 22nd 2020, a joint announcement by the Ministry of Hajj and Ministry of Health that Hajj will be conducted with extreme limitations. The 2020 Hajj was extraordinary with no international pilgrims and a very few selected individuals, mostly from a pool of Saudi COVID-19 survivors of

20-65 years of age (none obese, none pregnant) were allowed to perform the Hajj. The total attendants was only 0.02% (n=1000) of the 3.5 million expected annual pilgrims to achieve at least 2 meters radius of free space around each pilgrim in the high crowd potential areas (the Kaaba, stone-throwing in Mina, and Mount Arafat).⁷ The implemented precautionary measures were extensive and excluded pilgrims with comorbidities, required COVID-19 testing 14 days before hajj with repeat testing on arrival to Makkah with monitoring throughout the Hajj journey by an electronic bracelet and to ensure negativity 14 days before Hajj and 10 days post Hajj, administration of meningococcal vaccine, maintenance of public health and social measures (PHSM) throughout transportation, housing and during the performance of the religious rituals, creating safety bubbles of 20 pilgrims with a guide and finally immediate isolation and quarantine for any symptomatic pilgrims. A repeat PCR test on planned pilgrims during the 4-day quarantine prior to the Hajj was positive among 4 potential pilgrims and these were excluded from the Hajj. In addition, 89 of 2,544 non-pilgrims tested positive and were excluded from the Hajj.⁸ It was with those measures that there was no reported Hajj associated COVID-19 cases among the pilgrims, the accompanying healthcare personnel and the non-medical Hajj workers.^{8,9} There was an extensive use of digital platforms such as the Tetamman and Tawakkalna which monitored symptoms in addition to providing medical guidance and the use of electronic bracelets to enforce quarantine and monitor pilgrims' movement. These applications and devices were a must for all pilgrims performing the 2020 hajj.⁹ To facilitate the process, pilgrim consent was taken to ensure they understood the requirements and their assurances to comply with the requirements.

In the 2021 Hajj, the number of pilgrims was about 60,000 of those 18-60 years of age. All local pilgrims, medical and non-medical workers at the Hajj were required to have two doses of an approved COVID-19 vaccine before the 1st of du Al Hejja (The 12th Hijri Calendar month).¹⁰

International pilgrims have to have 2 doses of a WHO approved COVID-19 vaccine with the second dose administered at least 1 week prior to entering KSA. All pilgrims had a proof of negative SARS-CoV-2 PCR 72 hours prior to arrival to KSA and on arrival they were quarantined for 72 hours and had a repeat PCR test within 48 hours of arrival. For the Hajj to proceed, at least 60% of residents in Makkah and Madinah had to have proof of vaccination with 2 doses of COVID-19 vaccine. Strict coordination of pilgrim movement to ensure compliance with PHSM and maintaining 1.5-meter distance between pilgrims during housing and all-times in gathering places, having face masks during the ritual, and the implementation of the concept of “bubbles” with each bubble consisting of 100 pilgrims with a guide responsible to ensure their strict compliance with strict schedule of movements and PHSM.⁹ The Ministry of Hajj and Umrah App was also required to be used during the registration procedure to perform Umrah/Hajj. The 2021 Hajj was also not associated with any COVID-19 cases.

As we enter the third year of the pandemic, the total global COVID-19 cases reached 503,166,775 with 6,218,551 deaths. In KSA, the number is 752,291 including 9,063 deaths. The 2022 Umrah season started 2nd of April 2022 and will continue till May 2nd 2022, with all COVID-19 restrictions lifted (Figure 1). The government of KSA has learned a great deal from the past two seasons of Umrah and Hajj in preparation of the upcoming 2022 Hajj. More critically is the learning from this year Umrah at this very interesting phase of the pandemic dominated by Omicron and its five sub-lineages. The Umrah season with peak numbers of pilgrims during the month of Ramadan during April 2022 with all restrictions lifted and opening of Umrah quotas to local and international pilgrims was a great success with no significant change of COVID-19 status seen in KSA. This is a great pre-event test for 2022 Hajj. This coming Hajj season will take place July 7-12, 2022 and KSA announced that this year Hajj is expected to include one million pilgrims.

The pilgrims must be under 65 years, be fully vaccinated with COVID-19 vaccine and to have a negative PCR test. The verification process of vaccination follows the same protocol for the verification of other mandatory vaccination. The escalation of the number of pilgrims comes as KSA had succeeded in reaching an excellent percentage in vaccine coverage and subsequently eased the restrictions. KSA adopted an extensive surveillance, implemented risk mitigation, and maximized COVID-19 vaccines coverage.¹¹ The experience gained from the annual hajj is of paramount significance with the adoption of effective risk assessment and preparatory procedures through collective efforts of all governmental agents. The concern of resurgence of COVID-19 outbreak with the currently circulating variants of concerns (VOC) strains or new emergent variants during 2022 Hajj is a possibility, but not a very likely one based on what has been seen on a global level with complete lifting of all PHSM with no testing, contact tracing or isolation and quarantine of infected individuals. It is the lack of increase of COVID-19 cases and deaths despite the above measures on a global level in addition to what has been seen in real-life experience during the current Umrah season in 2022 on a local level is a reassuring indication. Thus, with close monitoring of the outcome of both Umrah and Hajj seasons in 2022, it is predicted that the 2023 Hajj season will return to full scale pilgrimage as many countries transit from a pandemic phase to an endemic phase of the COVID-19.

Acknowledgements

JAT conceived the idea, ZAM and JAT wrote the initial draft and developed the final draft. All authors edited, revised and approved the final draft.

Conflict of interest

None declared.

Funding

None declared

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Figure 1. Near Normal resumption of Umrah pilgrimage during the Holly month of Ramadan 2022

