

Contents lists available at ScienceDirect

International Journal of Infectious Diseases



journal homepage: www.elsevier.com/locate/ijid

Pilgrimage and COVID-19: The risk among returnees from Muslim countries



ARTICLE INFO

Article history: Received 23 April 2020 Accepted 24 April 2020

ABSTRACT

COVID-19 has now spread to become a pandemic. We confirmed six Muslim pilgrims with COVID-19 among the passengers on a flight from Pakistan, following a border inspection in Guangzhou, China. We subsequently alerted home countries to prepare early in order to manage the risk from returning pilgrims. The resulting strategies of inspection and quarantine needed to cover those returning from all Muslim countries, not just Saudi Arabia.

© 2020 The Author(s). Published by Elsevier Ltd on behalf of International Society for Infectious Diseases. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Editorial

In becoming a pandemic during the first quarter of 2020, the 2019 novel coronavirus disease (COVID-19) has become an international issue. By early April, the global case total has exceeded 1 million (WHO, 2020).

A correspondence published in the *Lancet* several weeks ago recognized the risk of contracting COVID-19 from Muslim pilgrimages in Saudi Arabia (Ebrahim and Memish, 2020). The authors alerted the pilgrims' home countries to make early preparations for such potential outbreaks.

Mecca, Saudi Arabia is the holiest city in the Islam world, with almost 2 million pilgrims from over 180 countries attending Mecca for the annual Hajj pilgrimage (Zumla et al., 2015). However, similar concerns regarding other Muslim countries should also be considered. In the late March, we confirmed six cases of COVID-19 among the passengers on a flight from Pakistan, following a border inspection in Guangzhou. China. These six cases had attended a pilgrimage at a masjid in Pakistan, remaining together for at least 6 months, and had returned to China due to the panic surrounding the COVID-19 epidemic. During their 6-month stay they had worshipped daily and lived in close proximity with thousands of pilgrims at the masjid, without wearing face masks, even when the COVID-19 epidemic had spread across the world. Thus, it is possible that they were infected by local COVID-19 carriers during religious rituals or other life contacts (Memish et al., 2019). These cases suggested a high risk of COVID-19 infection for pilgrims travelling during the epidemic period.

As the epidemic continues to spread globally, there will be an increasing number of pilgrims returning to their homelands. We fully support the suggestion that the home countries should prepare an adequate quarantine infrastructure (Ebrahim and

Memish, 2020). In order to prevent community transmission caused by returning pilgrims, the border inspection and quarantine strategy should be tightened for returnees from all Muslim countries, and not limited to Saudi Arabia.

Acknowledgments

We would like to thank Dr Zongqiu Chen, Dr Di Wu, Dr Shunming Li, Dr Yongguang Li, Dr Xuemin Liang, and those from Baiyun CDC and Huangpu CDC who were involved in investigating these cases

This work was supported by the Medical Health Technology Project for Guangzhou (20181A011051), the Science and Technology Research Planning Project in Guangzhou (201707010451), and the Project for Key Medicine Discipline Construction of Guangzhou Municipality (2017-2019-07).

The authors declare no conflicts of interest.

Conflicts of interest

The authors declare no conflicts of interest.

References

World Health Organization. Coronavirus disease (COVID-2019) situation reports-76 [2020-04-05] https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports.

Ebrahim SH, Memish ZA. COVID-19: preparing for superspreader potential among Umrah pilgrims to Saudi Arabia. The Lancet 2020;395(10227):e48.

Zumla A, Hui DS, Perlman S. Middle East respiratory syndrome. The Lancet 2015;386 (9997):995–1007.

Memish ZA, Steffen R, White P, et al. Mass gatherings medicine: public health issues arising from mass gathering religious and sporting events. The Lancet 2019;393 (10185):2073–84.

Yuzhou Gu¹ Jianyun Lu¹ Zhicong Yang* Guangzhou Center for Disease Control and Prevention, Guangzhou,

Guangdong Province, China ¹These first authors contributed equally to this article.

* Corresponding author. Tel.: +86 20 36052333;

fax: +86 20 36055823.

E-mail address: zhicongyanggz@163.com (Z. Yang).

Received 23 April 2020 Accepted 24 April 2020