

Correspondence

Authors' response

Sir,

We are thankful to Karabay and Yahyaoglu for commenting on our article¹. It is a basic principle of epidemiology that the prevalence of any infectious disease varies between agent, host and environment, time, place and person. Our study population was the pilgrims who came from long distances, were elderly, exhausted and with low immunity, and suffered from overcrowding and fatigue. Unfortunately, Karabay and Yahyaoglu quoted a reference of a textbook² which reflects predominant organisms of CAP mentioned in the general population, not our study population. The high prevalence of *Pseudomonas aeruginosa* and *Candida albicans* in our study¹ was supported by another major factor of co-morbidity, *i.e.* diabetes mellitus. Of the total 141 patients, 55 (>39%) were diabetic and such patients are prone to get opportunistic infections due to *P. aeruginosa* and *C. albicans*. Regarding *Legionella pneumophila*, we would like to mention that *L. pneumophila* was not diagnosed on routine microbiology laboratory; additional diagnostic kits and other material mentioned¹ were used. For

other similar national or international studies and studies conducted during the period of pilgrimage, the diagnostic methodology of *L. pneumophila* was not included for aetiological identification. Lung biopsy and *Candida* mannan antigen testing were not included in study protocol. Again, we would like to emphasize that our study population was the pilgrims; more than 2.5 million people staying in a *Makkah* for a short period of time. All government and private hospitals were overcrowded; the invasive procedures like lung biopsy were not possible. These patients were admitted for a short period of time and were discharged either on their request or due to high turnover of patients.

At the time of collection of clinical data for surveillance of healthcare associated infection (HAI), the Centers for Disease Control and Prevention (CDC)³ definition was used and the cases were clearly defined as HAI and community acquired pneumonia. All those positive cultures which were not supported by radiological and clinical diagnosis were defined as colonized and excluded from the study.

Atif H. Asghar* & Syed Zahid Bukhari**

*The Custodian of the two Holy Mosques
Institute of Hajj Research
Umm Al-Qura University
Makkah, Saudi Arabia

**Department of Laboratory
Hera General Hospital
Makkah, Saudi Arabia

*For correspondence:
asghar1000@gmail.com

References

1. Asghar AH, Ashshi AM, Azhar EI, Bukhari SZ, Zafar TA, Momenah AM. Profile of bacterial pneumonia during Hajj. *Indian J Med Res* 2011; 133 : 510-3.
2. Donowitz GR, Mandell GL. Acute pneumonia. In: Mandell GL, Bennett JE, Dolin R, editors. *Mandell, Douglas and Bennett's principle and practice of infectious diseases*, 6th ed. Philadelphia: Elsevier; 2005. p. 819-45.
3. Centers for Disease Control and Prevention (CDC). Surveillance definition of healthcare associated infection and criteria for specific types of infections in the acute care setting. *Am J Infect Control* 2008; 36 : 309-32.