

Correspondence

Epidemiology of travel-related malaria in a non-malarious area of Saudi Arabia

To the Editor

We read with profound interest the article on 'Epidemiology of travel-related malaria in a non-malarious area of Saudi Arabia' by Al-Tawfiq JA which was recently published in the Saudi Medical Journal.¹ We congratulate the author on the work done in reviewing and analyzing the data on malaria cases diagnosed at the Saudia Aramco Medical Services Organisation (SAMSO) over an 11 year period (1994-2005). The author concluded that "there were no active cases of malaria transmission within the Eastern province of Saudi Arabia." It is reassuringly similar to the findings in Bahrain,² that a declining trend was seen in SAMSO. However, it is rather difficult to accept as valid the deduction regarding the status of malaria transmission for an entire province with a population of approximately 3 million on the basis of data relating to a selected segment of the population numbering 370,000. Definitive assessment of the status of malaria for any population requires a comprehensive appraisal of all available data, including malaria cases diagnosed at government/private healthcare, and laboratory facilities, or those obtained from a centralized regional or national reporting agency. In our study on the status of malaria in the Kingdom of Bahrain,² a rigorous and comprehensive analysis of National data over a 10 year period (1992-2001) was conducted. The findings showed conclusively that all cases of malaria seen in Bahrain are imported, and no active transmission exists. In addition, we also reported a decline in the total number of potential breeding spots for anopheline mosquitoes during the study period.

Similar to the data for Bahrain, the figures reported by Al-Tawfiq JA¹ confirm the notion that the majority of imported malaria in the region are from the Indian subcontinent and mostly due to *Plasmodium vivax*. Anecdotally, it is known that, many expatriates travel to their home countries during the summer months (June/July) and the SAMSO experience showing the highest number of malaria cases acquired outside Saudi Arabia in September is reflective of this. In Bahrain, it has been shown that malaria chemoprophylaxis was

sought mainly by expatriates who were traveling to malaria-endemic areas, and this trend tended to be highest in the summer months of June and July.³

A declining trend in malaria cases over the study period was demonstrated in both reports. From the Bahrain experience, the availability of antimalarial drugs over the counter makes it highly probable that the undesirable practice of self-medication is occurring, resulting in fewer numbers presenting and being diagnosed at health care facilities. In addition, we suggested that the conduct of medical screening as well as increased health awareness in the home countries of incoming expatriates may result in many of them taking antimalarial drugs (particularly tissue schizonticides) before arrival in Bahrain. Although no reason was proffered by the author for the finding that most of the cases were diagnosed between 1994-1996, it is possible that similar factors might be at play. However, it would be interesting to know whether or not SAMSO offers malaria screening for new employees from malaria endemic regions or if chemoprophylaxis is made available for those traveling to areas at risk of malaria infection. Provision of either or both of these essential services might explain the steady decline in the number of cases thus providing a strategic model for further reducing imported malaria in the region.

Abiola C. Senok
Abdulrahman Y. Ismaeel
Department of Microbiology
Immunology and Infectious Diseases
College of Medicine and Medical Sciences
Arabian Gulf University
PO Box 22979, Manama
Kingdom of Bahrain

Reply from the Author

No reply received from the Author.

References

1. Al-Tawfiq JA. Epidemiology of travel-related malaria in a non-malarious area in Saudi Arabia. *Saudi Med J* 2006; 27: 86-89.
2. Ismaeel AY, Senok AC, Jassim Al-Khaja KA, Botta GA. Status of malaria in the Kingdom of Bahrain: a 10-year review. *J Travel Med* 2004; 11: 97-101.
3. Al Khaja KA, Sequeira RP, Ismaeel AY. Evaluation of malaria chemoprophylaxis in Bahrain. *J Travel Med* 2003; 10: 346-349.