

## Tropical Medicine and Infectious Diseases 2019: Measures to control infections spread associated medical tourism - Enas Gewaily - Police Hospital

**Enas Gewaily**

Police Hospital, Alexandria

Healthcare-associated infections prevalence in developing countries is substantially higher than in Europe and the United States. The risk of acquiring infection is 2 to 20 times higher in developing countries. Medical tourism is the term commonly used to describe people traveling outside their home country for medical treatment. Patients may pursue medical care abroad for a variety of reasons, such as decreased cost, a preference for care from providers from a similar culture, or to receive a procedure or therapy not available in their country of residence. Medical tourism is a worldwide, multibillion-dollar phenomenon that is expected to grow substantially in the next 5–10 years.

Infection control issues must be considered, as patients may be colonized or infected with multidrug-resistant bacteria. Complicating infections may appear early or late. Prominent bacterial species causing nosocomial infections and resistance patterns vary geographically. In many countries, antibiotics are available without prescription; overuse is common and resistance widespread, so nosocomial infections may be caused by unusually resistant bacteria that reflect problem pathogens in that hospital or region.

Many countries with robust medical tourism programs lie in tropical and subtropical regions where malaria, dengue fever, enteric fever, and other endemic infections exist. Many have high background rates of tuberculosis, antibiotic resistance, and hepatitis B, hepatitis C, and human immunodeficiency virus (HIV). Health care providers should be vigilant for the possibility of resistant infections among patients who have traveled for medical procedures and take measures to control their spread in the home country. Medical tourists are at risk for procedure-related infections e.g. wound and blood-borne infections. Travel abroad for healthcare has increased rapidly; interventions include organ transplant; cardiac surgery; reproductive care; and joint, cosmetic, and dental procedures.

Individuals who receive medical care abroad are a vulnerable, sentinel population, who sample the local environment and can carry home unusual and resistant infections. Medical tourists are at risk for hospital-associated and procedure related infections as well as for locally endemic infections. The term “medical tourism” has come to mean not only the treatment of patients in other countries, but also to indicate non-essential and elective treatments such as cosmetic surgery, treatment for substance abuse and dermatological conditions such as hair transplantation. The entry of several Arab countries into the World Trade Organization has facilitated this development.

Patients from the Gulf countries were sent to Beirut, Cairo, Paris, Germany and other cities for medical treatment.

Medical tourists leave their homes and arrive at their destination having unknowingly served as a hitchhiking medium for their native microbes. Likewise, medical tourists who pick up organisms in a hospital carry these microbes back home. Just like that, two different places that were initially naïve to a world of bacteria are now colonized with new strains, including good bugs and bad bugs.

More than 1 billion people travel by air each year. There are several important ways in which air travel can influence the global spread of emerging and established infectious disease. Travelers should be considered an integral part of the global surveillance network for emerging infections. Research and the knowledge gained can be used to alert the global community to the presence or susceptibility patterns of pathogens in different regions; inform strategies that can be used to control infections in developing countries; and prepare travelers to those areas and guide the care of those returning. Patients contemplating medical tourism should be advised of procedure-related as well as typical travel-associated risks. The public should be informed of potential infectious disease risks associated with overseas hospital care.

Efforts such as the Chennai Declaration—a consensus report resulting from a 2012 meeting in Chennai, India, of healthcare representatives, experts, and policy makers from India and WHO, which aimed to formulate a plan to address the global challenge of antimicrobial resistance from the Indian perspective—attempt to tackle the resistance problem. For medical tourists, a tracking system is needed as patients from one institution may return to many different countries and institutions, making it difficult to identify problems at a particular institution. Improved communication is essential to optimize continuity of care of medical tourists who may have follow-up on a different continent by a clinical team unaware of site(s) of medical and surgical care. Medical tourists may carry home unusually resistant microbial flora; patients hospitalized after return from medical care in high-risk destinations such as South Asia should be placed on contact isolation and cultured for resistant organisms. Decisions about empiric therapy and surgical prophylaxis should consider recent travel history and procedures abroad. Surveillance networks such as GeoSentinel (55 travel-tropical medicine clinics on 6 continents) can be refined to capture data on antimicrobial resistance.