
Commentary

The correlation between medical tourism and biotechnology

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There is evidence of a correlation between the emergence and growth of modern medical tourism and the growth of the international biotechnology market. But before we explore this, we need to understand what medical tourism currently is and what it is becoming.

The Medical Tourism Association¹ defines medical tourism as when people who live in one country travel to another country to receive medical, dental or surgical care while at the same time receiving care equal to or better than the care they would have in their own country, and are traveling for medical care because of affordability, better access to care or a higher level of quality of care. Although the age of modern medical tourism arguably started with the dawn of the current millennium, medical tourism is as old as civilization itself. Over 2000 years ago, affluent citizens of Rome would often travel to the areas now known as Switzerland and Turkey to take advantage of therapeutic mud baths and hot springs found in those areas.

Although very little hard evidence exists as to the number of medical tourists, procedures performed and/or size of the market, there is enough evidence of a massive disruptive trend in the form of the globalization of health care. Millions of patients are travelling to other countries for various medical procedures in areas such as orthopedics, cardiology, oncology, elective/cosmetic surgeries, dentistry and many more. In addition, these medical tourists are spending billions of dollars (estimated US dollars) on treatments all over the world, typically on a fee-for-service, cash basis. The exact amounts are not known, but it has been reported by Deloitte and Touche and others as being in the tens of billions (US dollars) worldwide. Currently, there are over 30 countries vying for market share across the world, and they are expected to be up to 300 JCI-accredited (Joint Commission International is the international accreditation body of US-based Joint Commission hospital accreditation body) facilities in the next few years.²

Thus, what is medical tourism becoming? There are sub-sectors within medical tourism that are becoming quite vibrant, and these are changing the nature of this relatively new industry. Retirement tourism will become huge as the large aging populations in the developed nations begin to look for cost-effective retirement solutions. According to a report by Price Waterhouse Coopers (2007),³ the global population is projected to rise from 6.5 billion in 2005 to 7.6 billion in 2020. It will also age rapidly, with about 719.4 million people or about 9.4 per cent of the world's inhabitants expected to be 65 years of age or over in 2020 (compared with 477.4 million or about 7.3 per cent from 2005). Older people typically have more prescription medicines than younger people, with 80 per cent of those over the age of 75 taking at least one and 36 per cent taking four or more. There will be an increase in

synergistic combinations of medical clinics and spas/resorts worldwide. These medispas or medspas will continue to offer a full slate of traditional spa services while at the same time tending to offer Complementary and Alternative Medicines (CAM) services, as well as traditional 'Western' medicine. These CAM treatments tend to involve biotech therapies rather than pharmaceutical-based treatments. One reason for the growth of these facilities is the increasing public interest (worldwide) in CAM treatments. In 2007, a 44-question survey was sent to US hospitals,⁴ and of those that responded, 20.2 per cent stated that they offered CAM services, and the most common reasons hospitals gave for including these alternative treatments were patient demand (84 per cent), clinical effectiveness (67 per cent) and consistency with organizational mission (57 per cent). Further evidence also comes from a 2007 National Health Interview Survey⁵ of 23 000 adults (in the United States) that found that about 38 per cent of adults have utilized CAM services. Finally, the controversial areas of organ transplants and surrogacy tourism will most likely continue to grow even as they face continued scrutiny from various legislative and regulatory bodies.

New stem cell therapies and other early-stage biotechnology treatments are becoming a strategic advantage for countries that are investing heavily in these innovations. Patients are being drawn to countries such as India, Turkey, Thailand, Mexico, Malaysia, Brazil, Korea, the UAE and many others for procedures that are simply not available or widely practiced in their home country. For example, it is probably not well known by the public that India has the highest number of FDA approvals worldwide outside of the United States, with over 20 000 scientists engaged in the biotech sector and world-class facilities for manufacturing generics that comply with international harmonized standards such as Good Laboratory Practices, current Good Manufacturing Practice and Good Clinical Practices. In 2006, it was reported that the Korean government was awarding US\$430 billion won (approximately \$400 million USD) aimed at supporting stem cell research (the government stated that it hoped to become one of the world's top three leading countries in stem cell research by 2015). South Korea is hoping to take advantage of its core competence in biotechnology and, in particular, stem cell research. In Malaysia, Frost and Sullivan⁶ reported that one of the key drivers that will boost their pharmaceutical and biotechnology industries is the country's medical tourism. Because Malaysia is a fast-emerging destination for medical tourism, thanks to its world-class health care and a good cost-to-value, it is expected that more foreign patients will seek treatment there, and this will ultimately drive up demand for pharmaceutical and biotechnology products. There are also suggestions⁷ that ultimately medical tourism may provide biotech and pharmaceutical companies from developed countries with leverage in intellectual property disputes with foreign countries (because of consumer demand for branded medications).

Thus, in conclusion, it appears that medical tourism and biotechnology are on parallel courses with similar growth patterns. What is good for one industry will most likely be good for the other. One thing is certain: both can be disruptive to the current *status quo* of health care and both will lead to continuing economic development in emerging markets worldwide.

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