



Impact of Medical Tourism on Cosmetic Surgery in the United States

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Summary: Developing countries have been attracting more international patients by building state-of-the-art facilities and offering sought-after healthcare services at a fraction of the cost of the US healthcare system. These price differentials matter most for elective procedures, including cosmetic surgeries, which are paid for out of pocket. It is unclear how this rise in medical tourism will affect the practice of plastic surgery, which encompasses a uniquely large number of elective procedures. By examining trends in the globalization of the cosmetic surgery market, we can better understand the current situation and what plastic surgeons in the United States can expect. In this article, we explore both domestic and foreign factors that affect surgical tourism and the current state of this industry. We also discuss how it may affect the practice of cosmetic surgery within the United States. (*Plast Reconstr Surg Glob Open* 2013;1:e63; doi: 10.1097/GOX.0000000000000003; Published online 28 October 2013.)

The cost of healthcare in the United States has become an increasingly hot topic. American politicians and economists debate over how best to curb the rising costs and improve access while maintaining quality. Although the domestic financial burden weighs on the minds of plastic surgeons, it has become a driving force behind the international medical tourism industry. Research has shown that the number of American patients interested in and actually traveling abroad for medical services is increasing.¹ Lower- and middle-income countries have begun to capitalize on the comparatively wealthier citizens of Western nations who want to obtain discounted health services. These developing nations build hospitals and court highly trained physicians

to attract foreign patients and get a piece of what has become a multibillion dollar industry. Cosmetic surgery centers are also appearing in medical tourism destinations. They offer procedures that are elective, paid for out of pocket, and nonurgent at a fraction of American prices, making them especially well suited for medical travel.

Medical tourism is expected to grow and capture more patients from developed countries including the United States, contributing to the globalization of the cosmetic surgery market. How this will affect the American practice of plastic surgery, a specialty dominated by elective procedures, is uncertain. In this article, we examine the rise and transformation of the medical tourism industry, foreign and domestic forces that influence cosmetic surgical tourism, and the pros and cons for all involved parties. The implications of recent healthcare changes within

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the United States for the field of cosmetic surgery are also discussed. Understanding the current state of medical tourism as it relates to the field of American plastic surgery can help prepare plastic surgeons in the United States to compete and excel in the global arena.

HISTORY AND TRANSFORMATION OF MEDICAL TRAVEL

Traveling in search of medical care is not a new phenomenon. Since antiquity, people with means have traveled to seek expertise, technologies, and environments for healing and recuperation. For centuries, Europeans have flocked to spas famous for their restorative waters, and peoples of the Middle East have journeyed to the mineral-rich waters of the Dead Sea.²⁻⁴ Some royal or otherwise influential patients requested that renowned doctors come to them. James Marion Sims (the father of gynecology) from South Carolina was sought by Empress Eugenie of France, the Duchess of Hamilton, and the Duchess of Austria to be their surgeon.⁵ In general, however, past tourists were traditionally wealthy patients from areas of less abundant or less advanced medical care who pursued higher quality care in areas with better technology or more temperate climates.³

Today's medical tourists diverge from the historical pattern of health tourism in 3 main ways: there is a much larger number of them, they tend to travel from wealthy countries to developing countries (a reversal of flow), and they are motivated by different factors, namely, by lower costs.^{2-4,6} Patients are drawn abroad by newer (often unproven) procedures performed in some developing countries, the opportunity to circumvent long wait times, and the added bonus of a vacation.^{2-4,6} Most medical tourists travel on their own accord and pay out of pocket for health services, with one exception being "outsourced" patients sent by their insurers to receive treatment abroad.⁶ Blue Shield of California introduced its Access Baja HMO in 2000, an outsourcing plan that allowed members with employer-sponsored benefit to receive healthcare services from Blue Shield-approved providers in Tijuana, Mexico. This was the first cross-border health plan in the United States.⁷ Most medical tourists, however, tend to seek elective and cosmetic procedures, which is a primary reason why this industry could potentially have a great effect on plastic surgery within the United States.^{1,6}

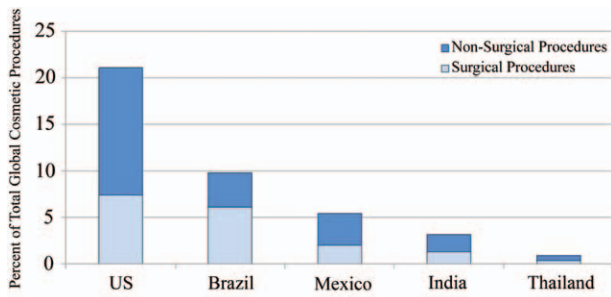
What initiated and enabled this transformation in international health travel? The answer is a combination of social, industrial, and economic developments in both lower income and developed countries. For one, the world has gotten smaller ow-

ing to more efficient air travel that enables more people to reach overseas locales. The internet has also facilitated medical tourism by providing consumers with access to information about foreign hospitals and accreditations, helping advertisements reach potential patients, and making it easier to find providers and book travel.⁶ The modernization of technology, medicine, and medical facilities in low-income countries that have become destinations has similarly fueled this transformation. Many have expanded their biomedical sectors and funding to attract more medical tourists. The vice president of the United Arab Emirates constructed Dubai Health Care City to entice tourists from the Middle East and elsewhere.^{3,6} Opened in 2002, Dubai Health Care City now attracts foreign and domestic patients and offers a comprehensive list of health services, including plastic surgery. Cosmetic procedures have become an integral part of medical tourism because they are not covered by insurance and the costs overseas are much lower.³

CURRENT STATE OF MEDICAL TOURISM AND TRENDS

The number of patients traveling abroad today varies widely among reports (from 60,000 to 50 million medical tourists worldwide), in part due to differing definitions of the term "medical tourist."^{6,8} Virtually all, however, agree that the industry is growing. In India alone, the number of tourists was predicted to rise from around 100,000 in 2002 to over 1 million in 2012.⁹ A 2008 poll of American consumers found that 39% would consider going to a foreign country for an elective procedure if the cost was half or less than in the United States and if the quality was guaranteed to be equal to or better than that in the United States.¹ Figure 1 shows the top sites of medical tourism for American patients as well as the average price differentials and popular services that are offered. The same report predicted that the number of Americans traveling overseas for healthcare would rise from 750,000 in 2007 to over 8 million by 2013.¹ It is clear that patients can save a lot of money by receiving treatment abroad, which is an especially important factor when deciding where to have elective surgery. Table 1 shows the typical pricing of common cosmetic procedures in the United States and select destination countries. Having an operation overseas is often less expensive than it is domestically even when airfare is included.^{1,6}

By now there are some established patterns of travel between departure and destination countries, which are often related to proximity, but also depend on what services a particular site offers.⁶ Mexico has



*Data from the International Society of Aesthetic Plastic Surgeons (ISAPS) 2011.
 **Number and percentages are extrapolated from an international survey of plastic surgeons, otolaryngologists, and dermatologists.

Fig. 2. Percent of total global cosmetic procedures by country.¹¹

rable to or better than the patients’ home countries.³ Americans, who are used to expensive healthcare, tend to be wary of the low prices and third world reputations of India, Thailand, and other destinations; quality and safety are major concerns of those considering procedures abroad.^{1,3} Accreditation by international or national organization is one way to reassure potential clientele. The Joint Commission International, a branch of the United States Joint Commission, evaluates the quality of hospitals around the world and accredits those that meet its standards, including 22 in India and over 30 in Thailand.^{1,6,13} Another method of demonstrating quality is to establish a formal connection between hospitals and American universities or providers (eg, Johns Hopkins Singapore International Medical Center at Tan Tock Seng Hospital in Singapore, which is staffed by Singaporeans and managed by Johns Hopkins Medicine International).^{6,14} Other hospitals recruit western-trained and certified physicians whose credentials are familiar to and trusted by American tourists.⁶ Most of these doctors come from developing countries, left to pursue training, and would not have returned except for the new opportunities and higher pay afforded by medical tourism.

India exemplifies these and other strategies for fostering medical tourism. Although modern technological centers are now emerging, India has long been regarded as being a developing country. Most Americans are more acquainted with images of crowded streets and children in need of vaccination than they are with the image of India as a booming center of biomedicine. However, its medical tourism industry, whose annual growth rate has been estimated at an astounding 30%, has blossomed in recent years owing to the breadth of procedures offered, modern technology, westernization of medical and surgical standards, low costs, attention to patients, and improvements in hospital management and organization.^{3,15} The last change led to better private hospitals and somewhat higher salaries that drew back many physicians from abroad.³ Tourism cam-

paigns advertise the world-class facilities, doctors, and technology, though with little supporting evidence on quality and outcome indices.¹⁵ The Indian government actively supports medical tourism. To attract patients and expand an industry that is expected to bring in \$2 billion in revenues, it introduced the M visa for medical tourists that lasts up to 1 year and has offered tax breaks to hospitals catering to tourists.^{6,9,15,16} The low cost of care resulting from inexpensive labor and virtual nonexistence of malpractice liability draws many patients seeking less costly elective procedures such as cosmetic surgery.³

ISSUES AND IMPLICATIONS

In contrast to the rapid expansion occurring in East Asia and elsewhere, American plastic surgery growth is curtailed by the high costs of healthcare and malpractice liability. According to a report from the American Society of Plastic Surgeons (ASPS), the number of surgical cosmetic procedures dropped by 16% from 2000 to 2012, whereas minimally invasive procedures rose 137%.¹⁷ Figure 3 shows surgical and minimally invasive procedural volumes in the United States from the past 8 years. The decrease in cosmetic surgical procedures can be attributed to an increase in procedural malpractice premiums, surgeons’ unwillingness to perform high-risk procedures, and the stagnant economy, which affects patients’ decisions about cosmetic surgery.

Malpractice premiums have been steadily rising to cover the larger payouts to patients who file malpractice suits.¹⁹ Malpractice liability also leads to the practice of defensive medicine (ie, over utilization of diagnostic tests and other services to avoid malpractice lawsuits), which undermines cost reduction and efficiency, resulting in higher procedural costs in the United States relative to other countries. As Horton and Hollier²⁰ recently stated, “cost-effective and quantity-conscious care provides no legal defense or financial benefit.” In response, some specialists are cutting back on high-risk procedures.¹⁹ The different

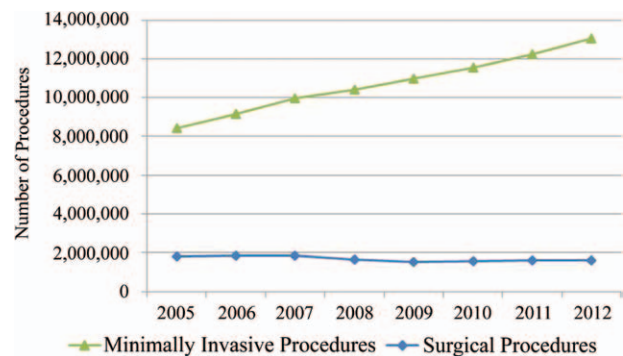


Fig. 3. Cosmetic procedures in the United States, 2005–2012.^{17,18}

growth rates of surgical and minimally invasive procedures shown in Figure 3 also reflect differences in demand for these procedures. Hoppe et al²¹ found that patients' decisions to have cosmetic surgery are based on long-term planning, but their decisions to undergo minimally invasive procedures are made impromptu during good economic times. The drop in cosmetic surgical procedures after 2008 reflects the lasting effects that the recession had on consumers, which deterred them from planning large purchases. The economic recovery in recent years has led to growth in the number of minimally invasive procedures but is not yet stable enough to encourage growth in surgical procedures. These economic forces contribute to the decline in surgical procedure volume.

Despite the accreditation strategies, physical safety and legal protection of medical tourists are still an issue. Most destination countries have inadequate malpractice laws and offer no legal recourse to patients.^{2,15} Travel insurance is available for tourists (usually only those without preexisting conditions) to cover the costs of treatment for complications or dissatisfaction with surgical outcomes, which would otherwise be billed to the patient.⁶ This type of insurance could encourage more patients interested in cosmetic surgery to go overseas. Pros and cons of medical tourism for patients and for countries send-

ing and receiving them can be found in Table 2. In addition to these, patients face the challenge of sifting through providers' Web sites for information about safety, some of which downplay the risks: "In the hands of expert surgeons and world-class facilities like Apollo Cosmetic clinics, the risks are really minimal and the procedures are absolutely safe."^{6,22} This type of misinformation is confounded by the lack of data on the quantity of patient traffic and quality of care in destination countries. American plastic surgeons and professional societies can help patients considering medical tourism by providing information about risks and counseling to help them make the optimal decision. The ASPS provides such information on their Web site, including risks and aspects of travel and follow-up care that patients should consider before going abroad.²³

CONCLUSIONS

All research suggests that medical tourism is a growing industry. More countries are building hospitals and courting patients, more physicians are moving to destinations of tourists, and each year, more patients are traveling. For plastic surgeons in the United States, this means that more potential patients will be going overseas and across borders where prices are lower and standards may be approaching those of the United States. The rapid globalization of the

Table 2. The Pros and Cons of Medical Tourism for Patients and Countries of Departure and Destinations^{2,3,6,8}

	Pros	Cons
Patients	Lower procedural cost* Higher nurse-to-patient ratio (more personal attention)* Medical care bundled with vacation* Privacy during recovery*	Risk of travel after surgery* Exposure to foreign pathogens* Privacy jeopardized by cross-border exchange of medical records Lack of follow-up care or continuity of care upon return* Lack of legal recourse in the event of malpractice* Distance, unfamiliarity with surroundings and culture, isolation from family and friends, greater potential for miscommunication*
Countries of departure	Increased opportunities for collaboration with modernized countries* Sending patients abroad can shorten domestic waiting lists	Loss of patients and revenue* Transport of microorganisms back from destination countries Must provide care for returning patients who have been injured or mistreated (treatment of complications can incur high societal and individual costs)*
Countries of destination	Revenue from patient medical services, accommodations, tourism, and travel* Improved facilities and technology* Retention of top health providers who may have moved abroad for better opportunities in the past*	Costs of upgrading infrastructure Increased health inequities between wealthy and poor Possibly drawing much needed health providers away from poor and rural hospitals

*A pro or con that affects cosmetic surgery.

industry also marks a fundamental shift in the world's perception of elective procedures: patients are becoming consumers and these medical services are being viewed as commodities.⁶ Economic forces, including supply, demand, and competition for market share, are affecting the global plastic surgery industry. Because the practice of medical travel does not seem to be going away in the foreseeable future, plastic surgeons in the United States must understand the international market and learn to compete in it.

There are 3 basic ways to retain American patients and compete with the low costs of cosmetic surgery abroad: lower domestic prices, provide superior care, or find a niche market. The first option is limited by the costs of living, supplies, and labor, which are generally higher in the United States than in countries that attract medical tourists. Depending on the rate of development in these countries and the rate that medical costs rise in the United States, their costs may approach those of the United States in the future. Connell,³ however, suggests that price differentials between medical tourist destinations and developed nations are growing, not shrinking. In the meantime, American plastic surgeons can strive to provide the best possible care, whereby justifying higher costs with quality. This can be done by offering a comprehensive array of procedures, improving patient satisfaction and the patient experience (ie, pre-, intra-, and postoperatively), and demonstrating leadership in the field through research and innovation. Plastic surgeons in the United States and organizations such as the ASPS can also counsel patients about the risks of going abroad that may be omitted from medical tourism Web sites. Finding a niche market essentially means finding a "sweet spot" of procedures that are profitable but have small enough price differentials that the expense of traveling overseas would not be offset by the savings. For example, if we assume airfare is \$1000, going abroad for chin augmentation, which in 2012 cost \$2480 on average in the United States, would not be worth it unless the procedure, accommodations, and other expenses totaled under \$1480.

Medical tourism with respect to plastic surgery is not purely good or bad for patients or countries that send and receive them, as seen in Table 2. It is important as we move forward with international partnerships and collaboration to share the collective knowledge for providing high quality and cost-effective healthcare. As plastic surgery in developing countries advances, new opportunities for international, multicenter research arise. Collaborative efforts could also ameliorate the health inequities exacerbated by medical tourism, which has been criticized for treating health services as a commod-

ity and undermining efforts to implement universal health coverage.² Government subsidizing and promoting of medical tourism may indirectly exacerbate the existing health inequities. In India, hospitals catering to tourists receive tax breaks and low interest loans to build facilities that are largely unaffordable to the local people.^{9,15} Many fail to provide the free care mandated in return for these subsidies. In effect, the hospitals receive the financial benefits of charitable institutions but provide few or none of the public services.^{10,15} The economic boons of tourism also draw providers to the modern facilities and higher wages available in cities, which further lowers access to and quality of care in rural areas.^{2,9}

There are gaps in the evidence and literature regarding medical tourism. Lunt et al⁶ identified what is perhaps the most important—the lack of data about the quality, safety, and risks involved with overseas care and surgery. Data regarding clinical outcomes and follow-up are also scarce, which is relevant to US plastic surgeons who must assume the postoperative care of patients who are treated abroad.⁶ Over a third of surveyed British plastic surgeons had seen patients with complications resulting from cosmetic surgery in a foreign country.²⁴ Outcomes data would also help patients, who currently only have access to information on providers' Web sites. What data are available are collected in nonstandardized ways, making them difficult to compare. For example, estimates of tourists vary widely due to different definitions of the label medical tourist. Future research should be directed toward closing these gaps in the literature to better illuminate the reality of cosmetic surgery tourism. To retain patients and be competitive in a global market, American plastic surgery must be vigilant of the changes in medical tourism and must adapt accordingly.

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