

# AN INTEGRATED BEHAVIORAL MODEL FOR INTERNATIONAL MEDICAL TOURISM



Sergey Nivens/Shutterstock.com

The growth in medical tourism has been enabled by globalization.

*From dental procedures to cardiac surgery, an international market is developing for medical tourism, thanks not least to globalisation and the high standard of medical treatment now available around the world. But what drives individuals to travel abroad for healthcare? In an important new study, Rosen College Assistant Professor Suja Chaulagain, Founding Dean Abraham Pizam, and Dean Youcheng Wang take a social psychological perspective of health-related behavior and the concepts that influence it.*

**M**edical tourism is one of the fastest growing and most profitable market segments for tourism in the world.

An estimated 16 million individuals travel to another country every year to access non-emergency healthcare, spending around \$3,800 to \$6,000 per visit on treatment and related transport and accommodation. The figure includes 1.4 million Americans who seek treatment abroad because of

such things as the rising cost of healthcare at home, an increase in health issues faced by an aging population, and the number of people who lack health insurance.

The growth in medical tourism has been enabled by globalization and the expansion in advanced health technologies and skills in both developed and developing countries, as well as the rapid development of communication and transport technologies. People travel to access treatment that is

unavailable or of a higher quality than is on offer in their own country or, alternatively, because another country can provide medical care at a lower cost and with shorter waiting times. The opportunity to have a vacation following treatment is an added attraction.

In a new study published in the *Journal of Travel Research*, researchers from UCF Rosen College of Hospitality Management have developed and tested an integrated behavioral model which looks at factors affecting individuals' decisions to engage in medical tourism. While other research has considered medical tourism from the point of view of its development, conceptualization, and impact on host communities, Drs. Suja Chaulagain, Abraham Pizam and Youcheng Wang are the first to take a social psychological health behavior perspective.

The TPB holds that individuals' behavior is influenced by the benefits and barriers they associate with it, plus three additional factors: their attitude (personal feelings or convictions) towards the behavior, their subjective norms (their concern of how others may perceive them for engaging in that behavior), and their degree of perceived control (any perceived difficulties) over that behavior.

Chaulagain, Pizam and Wang's research integrates the HBM and the TPB to investigate what prompts Americans to engage in medical tourism. Specifically, it investigates hypotheses covering the positive and negative impacts of perceived benefits and barriers to individuals' engagement in medical tourism, and the impact of perceived barriers on individuals' perceived behavioral control. In addition it considers the role of attitude, subjective norms and behavioral

treatment abroad is a good idea, and an enjoyable and pleasant experience. Factors considered for subjective norms included the influence of other people's opinions and personal experience of medical tourism. Perceived behavioral control looked at the difficulty an individual would have in travelling abroad for medical care, for example their physical ability and whether they have the knowledge and resources to do so.

The final construct tested in the study was behavioral intention, that is whether individuals predict that they will travel abroad for medical treatment and if so, when.

## STRUCTURE OF THE STUDY

The study's target population was American adults with a health condition requiring medical care, who know about, and are interested in, the possibility of travelling

**MEDICAL TOURISM IS ONE OF THE FASTEST GROWING AND MOST PROFITABLE TOURISM MARKET SEGMENTS IN THE WORLD.**

control in individuals' decisionmaking, as well as the potentially moderating role played by the severity of individuals' health conditions.

Perceived benefits investigated by the study include medical factors such as access to better quality care and services, and shorter waiting times than at home. Non-medical considerations include cost savings and the opportunity to combine treatment with a vacation.

Perceived barriers were broken down into three areas for testing. Interpersonal barriers included individuals having no travel companions, or family and friends not approving of their intentions. Structural barriers included not having the necessary resources such as time or knowledge, or being hampered by work or family commitments. Intrapersonal barriers included anxiety about security, risk to health, or fear of the unknown.

Of the three additional elements of the TPB, regarding attitude, the study probed whether individuals felt that seeking medical

abroad for treatment. Participants were recruited by an online panel survey company to take part in a self-administered web-based questionnaire.

After screening, 246 responses were studied. Of these participants, 52% were male, and 36% were aged between 35 and 54. Around one-third had a bachelor's degree and around one-quarter had an income of between \$25,001 and \$50,000. Some 46% of participants were married, and 57% declared their ethnicity as white. Around 30% had health insurance through employment, 23% had Medicare, and 8% of respondents were uninsured.

Initial data analysis included exploratory factor analysis (EFA) to find out more about the dimensions of the perceived barriers and perceived benefits. Confirmatory factor analysis (CFA) was performed to evaluate the overall measurement model. Structural equation modeling (SEM)—a rigorous statistical analysis technique used to investigate the structural cause and effect



Combining treatment with a vacation is an attractive benefit to some.

Grimbox/Shutterstock.com

## AN ESTIMATED 16 MILLION INDIVIDUALS TRAVEL TO ANOTHER COUNTRY EVERY YEAR TO ACCESS NON-EMERGENCY HEALTHCARE.

relationships between measured and latent variables—was then performed to test the study hypotheses.

### RESULTS OF THE STUDY

SEM analysis confirmed the study hypotheses. The results indicate that perceived benefit of engaging in medical tourism is positively associated with individuals' attitude to medical tourism, and perceived barriers have a negative impact on attitude. In addition, perceived barriers of engaging in medical tourism have a negative impact on perceived behavioral control, and behavioral intention positively influences attitude, subjective norms, and behavioral control.

The results also support the hypothesis that perceived severity of an individual's health condition moderates the relationships

between perceived benefits and attitude, perceived barriers and attitude, and attitude and behavioral intention.

The study revealed that the construct of perceived benefits has more impact on individuals' attitudes to medical tourism than that of perceived barriers. In addition, the negative effect of barriers on behavioral control suggests that 'individuals with high barriers tend to believe that traveling to a foreign country to receive medical treatment is not entirely within their control.'

The results confirm that 'attitude is a positive predictor of intention,' and that what friends and family think about individuals' behavioral intention is an important factor in decisionmaking. Of the three additional factors that shape intention according to the TPB, the results show that behavioral control

is the most important, followed by attitude and then subjective norms.

### IMPLICATIONS OF THE RESULTS

Chaulagain, Pizam and Wang's study presents important theoretical insights into medical tourism. It also provides an innovative predictive model that incorporates both the HBM and the TPB, and shows how individuals form their intentions towards medical tourism.

The study's focus on attitude and behavioral intention is particularly important, together with the finding that perceived barriers are a significant factor in determining attitude. The study is also one of the first to consider the perceived severity of an individual's health condition and how this moderates and interacts with other factors to affect individuals' intentions.

In addition, the research provides practical insights to inform the marketing strategies of tourism destination managers, as well as the managers of healthcare facilities and medical-tourism travel agencies. The most significant is the need for improved communication to help individuals, together with friends and family, to understand more about the benefits of medical tourism. This includes the high quality of medical care and treatment that destinations provide, as well as information about availability, lower costs and shorter waiting times, and the kind of vacation individuals can enjoy afterwards.

The findings suggest that greater attention should be paid in promotional and marketing activities to addressing, and helping individuals to negotiate, the perceived barriers to medical tourism. This includes not only safety and security concerns, but also anxieties about post-treatment follow-up in individuals' home countries. The study suggests that employers and insurance companies should be encouraged to develop policies to support medical tourism, including paid leave.

Chaulagain, Pizam and Wang's research provides new understanding of the factors that influence the fast-growing sector of medical tourism. As the authors conclude: 'Equipped with this information, medical service providers and destination decisionmakers will be able to create effective marketing strategies to attract more customers through product differentiation, thereby creating a continual, competitive advantage.'

## RESEARCHERS IN FOCUS

### RESEARCH OBJECTIVES

The team of Rosen researchers aim to understand what drives individuals' decisions to engage in medical tourism

### REFERENCES

Chaulagain, S., Pizam, A., and Wang, Y. (2020) An Integrated Behavioral Model for Medical Tourism: An American Perspective. *Journal of Travel Research*. DOI: 10.1177/0047287520907681

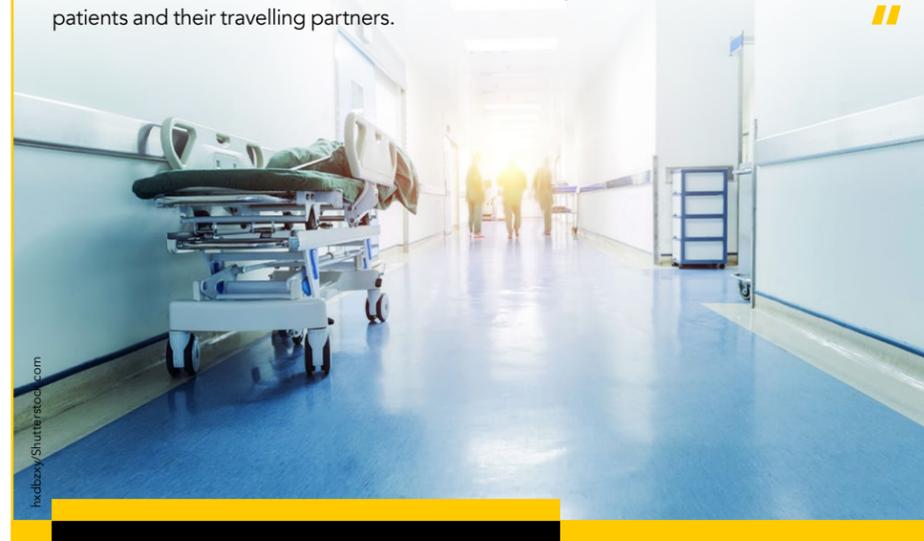
### PERSONAL RESPONSE

**The survey that forms the basis of your research was conducted in 2018, before the arrival of the COVID-19 pandemic. What impact do you think the pandemic will have on medical tourism?**

“ The COVID-19 pandemic has drastically affected the tourism and hospitality industries including medical tourism. The pandemic-related border closures, travel restrictions, and strict quarantine requirements have made it difficult for patients to travel abroad for medical tourism resulting in postponements of elective surgeries and non-emergency treatments.

Another pandemic-related concern for medical tourists is the availability of treatments and ICU beds in medical facilities located in host countries, where the resources are being redirected for the treatment of COVID-19 patients.

All these situations and the ongoing uncertainty of the pandemic are making it difficult for individuals to plan their trips for medical tourism. However, individuals will soon begin to travel abroad for medical treatments again, once COVID-19 vaccines become widely available in host countries and medical-tourism service providers can ensure safety for patients and their travelling partners.



fxdbzy/Shutterstock.com

## Dr. Suja Chaulagain



Dr. Suja Chaulagain is an Assistant Professor at Rosen College of Hospitality Management at the University of Central Florida. Her research foci are the integration of hospitality and healthcare, elderly consumer behavior in the hospitality and healthcare industries, senior housing and relocation, and medical and wellness tourism.

**W:** [hospitality.ucf.edu/person/suja-chaulagain-2/](http://hospitality.ucf.edu/person/suja-chaulagain-2/)  
**E:** [Suja.Chaulagain@ucf.edu](mailto:Suja.Chaulagain@ucf.edu)  
**T:** +1 407.903.8164

## Dr. Abraham Pizam



Abraham Pizam is the founding dean (2000–2018) of the Rosen College of Hospitality Management at the University of Central Florida. Currently he serves as Professor and Linda Chapin Eminent Scholar Chair in Tourism Management. Professor Pizam is widely known in the field of hospitality and tourism management and has conducted research projects, lectured, and served as a consultant in more than 30 countries.

**W:** [hospitality.ucf.edu/person/dr-abraham-pizam/](http://hospitality.ucf.edu/person/dr-abraham-pizam/)  
**E:** [Abraham.Pizam@ucf.edu](mailto:Abraham.Pizam@ucf.edu)  
**T:** +1 407.903.8010

## Dr. Youcheng Wang



Dr. Youcheng Wang is the Dean and Preeminent Chair Professor in Destination Marketing at the Rosen College of Hospitality Management at the University of Central Florida, and a fellow of the International Academy for the Study of Tourism. His research and consulting interest focuses on hospitality marketing and management, destination marketing and management, customer relationship management, information search behavior, collaborative strategies, and technology management.

**W:** [hospitality.ucf.edu/person/youcheng-raymond-wang/](http://hospitality.ucf.edu/person/youcheng-raymond-wang/)  
**E:** [Youcheng.Wang@ucf.edu](mailto:Youcheng.Wang@ucf.edu)  
**T:** +1 407.903.8011