



**KERMAN UNIVERSITY
OF MEDICAL SCIENCES**

Faculty of Management and Medical Information Sciences

In Partial Fulfillment of the Requirements for the Degree (Msc)

Title

**Investigating the impact of international financial crises and covid-19
pandemy on health tourism demand**

By

Elika Neghabi

Supervisor

D.R. Asma Saber Mahani

Advisor

D.R. Seyed Abdolmajid Jalaei

Thesis No : (123456)

Date (June/2025)

Abstract

Background and Objectives: Tourism is one of the most important and important economic and one of the most prominent communication, social and cultural factors worldwide, which directly or indirectly constitutes about 95% of the world's GDP. It contributes to the economy in a way that countries call it invisible, and it is the third largest industry in the world after the oil and automotive industries. According to statistics from the World Tourism Organization, Iran ranks fifth in natural attractions, tenth in historical and ancient attractions, twentieth in medical science, and sixteenth in pharmaceutical science. These statistics indicate Iran's good potential for the growth of the medical tourism industry. Given that each health tourist brings three times more foreign exchange than a non-health tourist, and according to statistics from the World Tourism Organization, one job is created in the country for every 7 foreign tourists, this number is one job for every 4 people for health tourism. This type of tourism has been considered as a competitive industry in the world and increasing competition has begun among Asian countries to attract health tourists. Given the limited health system budget, the low share of the healthcare sector in GDP, increasing healthcare system costs, insurance fund payments, and increasing pressure on hospitals to control costs, it seems that international-level medical centers will be an important step in attracting health tourists abroad. Given the importance of this issue, this study aimed to examine the impact of international financial crises and the Covid-19 pandemic and determine the degree of uncertainty of these crises on the demand for health tourism.

Methods: This research is a descriptive-analytical study conducted during the years 1392 to 1401 as a time series. The impact of macroeconomic variables, including exchange rate fluctuations, liquidity volume, and foreign direct investment on GDP and the coronavirus epidemic at the macro level has been estimated and modeled using the GARCH model. Selected hospitals in Khorasan Razavi province have been studied. The volume of data collected from the Statistical Center of Iran, the Central Bank for the macro variables examined in our study has been 10 years, which has been examined with a quarterly frequency (40 seasons), and the volume of health tourism data from the hospital information system has also been examined with a quarterly frequency. Eviews software has been used for the final analysis of the data.

Results: The results showed that the increase in the exchange rate had a positive and significant effect (coefficient 0.13) on the demand for health tourism, while the ratio of foreign direct investment to GDP showed a negative effect (coefficient -8.7). The ratio of liquidity volume had a negative effect (coefficient -8.3) on the demand for health tourism. And the Covid-19 pandemic also had a negative impact on tourism demand. In other words, in periods when this variable was equal to one, the amount of tourism revenue decreased. The results of the Granger causality test generally showed that the exchange rate and tourism income mutually affect each other; also, the ratio of foreign direct investment to GDP unilaterally creates changes in tourism income, while no direct relationship is observed between the ratio of liquidity to GDP and tourism income. In addition, the COVID-19 outbreak causes changes in tourism revenue, but the reverse effect is not seen. Also, the exchange rate and the ratio of foreign direct investment to GDP are mutually causal. In general, two-way causality relationships exist only between the exchange rate and tourism revenue, and between the ratio of foreign direct investment to GDP and the exchange rate.

Conclusion: Given that the fluctuations of the variables examined in this study are not under the management and supervision of health system stakeholders, this research suggests that health system policymakers, considering the impact of these variables on health tourism revenues, use these situations as an opportunity to generate more income in the field of health tourism. And by applying information technology and using social networks in the extensive marketing of health services, especially in countries of tourism origin, holding international tourism exhibitions, continuous studies on target markets, creating a comprehensive health services information site, and introducing Iran's health tourism capacities, they will play an important role in attracting health tourists. The Ministry of Health is also expanding online tourism services, facilitating visa and residency issuance processes, supporting the development of health tourism infrastructure, training and improving human resource skills in the field of tourism, developing health tourism based on traditional medicine, creating a comprehensive information system, monitoring service quality and pricing, developing support services including interpreters, transportation, accommodation, etc. Try to create a safe, high-quality, and affordable environment for health tourists and transform Iran into a health tourism hub in the region.

Keywords: Health tourism, financial crises, COVID-19 pandemic.