The Dual Effects of Currency Devaluation on Health Tourism Development: Insights from a Grounded Theory Study

Masoumeh Nabian[1]

ABSTRACT

Currency devaluation has become an increasingly influential macroeconomic condition shaping the future trajectories of health tourism in emerging economies. While a depreciated national currency may create short-term competitive advantages for inbound medical travel, it also introduces structural pressures that can undermine long-term sectoral resilience. This study seeks to advance future-oriented understanding by conceptualizing how currency devaluation simultaneously generates opportunities and pressures in health tourism development.

Drawing on a qualitative research design, this study employs a Grounded Theory approach to examine the perceptions and experiences of key stakeholders within Iran's health tourism system, including policymakers, healthcare providers, intermediaries, and tourism experts. Data were collected through in-depth semi-structured interviews and analyzed through iterative open, axial, and selective coding, guided by constant comparison and theoretical sampling. Trustworthiness was ensured through methodological triangulation, peer debriefing, and reflexive analysis.

The findings identify a core category conceptualized as the duality of opportunity and pressure, through which currency devaluation operates as a double-edged mechanism. On the opportunity side, devaluation enhances international price competitiveness, expands regional demand, and stimulates private sector participation in medical tourism services. Simultaneously, it generates future-critical pressures, including escalating operational costs, intensified competition over healthcare resources, regulatory misalignment, and increased dependence on volatile macroeconomic conditions. These dynamics interact over time, shaping strategic responses and adaptive capacities at organizational and governance levels.

By shifting the focus from linear impact assessments to a process-oriented and future-sensitive conceptual model, this study contributes to tourism futures scholarship and health tourism research. The proposed framework highlights how macroeconomic shocks are translated into evolving development pathways and emphasizes the role of proactive governance in steering health tourism toward sustainable and equitable futures. The insights offer transferable implications for other destinations confronting currency instability and structural uncertainty.

Keywords: Health Tourism, Currency Devaluation , Tourism Futures ,Tourism Development , Grounded Theory

1. INTRODUCTION

In recent decades, health tourism has emerged as one of the most dynamic and rapidly growing segments of the tourism industry, becoming an important component of the global market for international services. Rising healthcare costs in many developed countries, long waiting times for certain medical treatments, and advances in medical technologies in developing countries have increasingly encouraged patients to travel abroad in search of medical care [1];[2]. Consequently, health tourism is not merely a form of travel but also a strategic instrument for economic development, as it can contribute to attracting foreign patients, increasing foreign exchange earnings, generating employment, and strengthening healthcare infrastructure [3]. For this reason, many countries have recently sought to enhance their position in the global health tourism market by adopting supportive policies and improving service quality.

[1] University of Science and Culture

One of the key determinants of destination competitiveness in tourism is the economic environment, particularly the cost of healthcare services. In this context, exchange rates and their fluctuations play a decisive role in shaping countries' competitive advantages. Currency devaluation often leads to a relative reduction in travel and treatment costs for foreign visitors, thereby increasing the attractiveness of destinations [4]. Conversely, severe exchange rate volatility may create economic uncertainty, negatively influencing tourists' decision-making processes and potentially reducing demand for medical travel [5];[6]. Within the field of health tourism, exchange rates are widely recognized as a critical factor in destination choice. When the value of the national currency declines, medical services become more affordable for foreign patients, providing host countries with a significant price advantage. As a result, many countries have successfully leveraged exchange rate differentials, combined with high-quality and cost-effective healthcare services, to capture a larger share of the global health tourism market [7]. Iran, endowed with substantial medical capacities, a skilled healthcare workforce, and relatively lower treatment costs compared to many countries in the region, possesses considerable potential for the development of health tourism. The presence of highly qualified physicians across various medical specialties, scientific advances in selected areas of healthcare, and cultural and geographical proximity to neighboring countries have positioned Iran as a promising health tourism destination in the Middle East [8];[9]. Moreover, the depreciation of the Iranian rial in recent years may, on the one hand, enhance the economic attractiveness of Iran's medical services for foreign patients, while on the other hand, it poses serious challenges to the national healthcare system. These challenges include rising costs of imported medical equipment, difficulties in procuring pharmaceuticals and advanced medical technologies, and increased financial instability within the health sector [10].

Accordingly, currency devaluation represents a multidimensional phenomenon that simultaneously generates opportunities and constraints for the development of health tourism. While changing economic conditions may strengthen incentives for medical travel to Iran, persistent exchange rate volatility may adversely affect service quality and the sustainability of healthcare infrastructure. In such a context, a comprehensive understanding of the various dimensions of this phenomenon, along with an in-depth analysis of the perspectives and experiences of key stakeholders, is essential for effective policymaking and strategic planning aimed at sustainable health tourism development.

Despite the significance of this issue, a review of the existing literature indicates that most previous studies have primarily focused on economic aspects or demand-side factors, with limited attention given to the structural and managerial implications of currency devaluation for the health tourism system. Furthermore, the majority of existing research has employed quantitative approaches, leaving the perspectives and lived experiences of key industry stakeholders largely unexplored. Therefore, adopting qualitative research approaches can contribute to a deeper understanding of the complex nature of this phenomenon and help uncover its less visible dimensions. Against this backdrop, the present study aims to explore the capacities and constraints of health tourism development in Iran in the context of currency devaluation and to propose a conceptual framework grounded in the perspectives of stakeholders in the healthcare and tourism sectors. By employing a qualitative approach, this study seeks to identify and analyze the opportunities and challenges arising from exchange rate fluctuations and to provide insights that can support a more nuanced understanding of their economic and managerial implications, thereby informing more effective strategies for the sustainable development of health tourism in Iran. Accordingly, this study contributes to the health tourism literature by conceptualizing currency devaluation as a dual process of opportunity and pressure, employing a grounded theory approach to capture the dynamic interactions shaping health tourism development.

2. Theoretical Foundations

2.1 The Concept of Health Tourism

Health tourism refers to the travel of individuals from their country of residence to another country with the purpose of receiving medical treatment, healthcare services, or other health-related services. This concept encompasses a broad spectrum of activities, including specialized surgeries, diagnostic services, infertility treatment, cosmetic procedures, rehabilitation, and wellness-oriented services [1];[11].

The rapid global expansion of this industry has been driven by a range of interconnected factors. Rising healthcare costs in many developed countries, limited insurance coverage, and long waiting times for certain medical procedures have encouraged patients to seek treatment abroad. At the same time, improvements in medical infrastructure and service capacity in many developing countries have increased their ability to attract international patients [12]. In this context, countries that are able to offer high-quality medical services, skilled healthcare professionals, and competitive pricing have secured a significant share of the global health tourism market [13]. Beyond addressing patients' therapeutic needs, health tourism plays an important role in the economic development of destination countries. The inflow of foreign patients contributes to foreign exchange earnings, generates employment opportunities, and stimulates investment in both medical and tourism infrastructure. For this reason, many governments have formulated strategic policies and programs aimed at strengthening their position in the global health tourism market [14].

2.2 Factors Influencing the Development of Health Tourism

Numerous studies indicate that the growth and dynamism of the health tourism industry are shaped by a combination of economic, social, political, infrastructural, and cultural factors. Among these, the cost of medical services is often regarded as the most crucial element. Significant differences in treatment costs between countries are one of the main drivers of cross-border patient movement worldwide. When the cost of providing healthcare services in a given country is substantially lower than in developed economies, that country becomes known among international patients as an affordable medical destination [11]. For example, the costs of cosmetic surgery, dental procedures, or infertility treatments in many developing countries can be 40 to 80 percent lower than in developed countries, which has encouraged patients from high-cost systems to travel to destinations offering more affordable care.

Beyond cost, the quality of medical services and the level of expertise and skill of physicians play a decisive role in the success of health tourism destinations. Research shows that the choice of a medical destination is not based solely on price; patient satisfaction with the treatment experience, clinical safety, and adherence to professional and ethical standards by healthcare providers are also critical considerations [12]. Countries such as India, Thailand, and South Korea have achieved remarkable growth in the global health tourism market by combining "low cost" with "high quality."

Another key group of factors relates to physical and tourism infrastructure. An efficient transportation network, international airports, standard accommodation facilities, adequate amenities, and effective coordination between healthcare providers and tourism services all contribute to enhancing the patient experience and increasing the likelihood of repeat visits. Political and economic stability is also fundamental, as economic volatility and perceptions of political insecurity can diminish foreign patients' trust and willingness to travel [12].

Social and cultural characteristics likewise influence patient preferences. Studies suggest that patients tend to favor countries that share cultural, religious, and linguistic similarities with their home country, as this proximity facilitates mutual understanding between patients and physicians and reduces the stress associated with cross-border care. For this reason, Muslim-majority countries such as Iran, Jordan, and Malaysia have been relatively successful in attracting patients from Arab states and Central Asian countries. Overall, the development of health tourism depends on a combination of economic advantages, service quality, and a supportive socio-cultural environment, and none of these factors alone is sufficient to guarantee the long-term success of a medical destination. These multidimensional factors suggest that health tourism development cannot be explained through purely economic lenses.

2.3 The Status of Iran in Health Tourism

Iran possesses remarkable potential for the development of health tourism. With its highly skilled medical workforce, notable advancements in certain specialized medical fields, relatively low treatment costs compared to regional competitors, and cultural affinity with neighboring countries, Iran is regarded as one of the key health destinations in Western Asia. Medical services in areas such as cosmetic surgery, infertility treatment, orthopedic surgery, ophthalmology and other specialized treatments are of considerable quality. Many foreign patients particularly from Iraq, Afghanistan, Azerbaijan and the Persian Gulf states choose Iran due to the affordability of services and their trust in the professional competence of Iranian physicians [15].

From an economic perspective, Iran's price competitiveness in comparison with its regional rivals is clearly evident. Empirical studies indicate that the cost of many medical services in Iran is approximately 50 to 70 percent lower than in comparable regional countries such as Turkey and the United Arab Emirates [9];[13]. This cost advantage stems from the country's economic structure, the relatively low exchange rate of the national currency against the US dollar and, in some cases, government support for the healthcare sector. Nevertheless, the sustainability of this price advantage depends on simultaneous improvements in the quality of medical services and hospital standards. International patients are not solely motivated by lower costs; rather, factors such as safety, high-quality care, and overall treatment satisfaction play a more decisive role in their destination choices. However, this cost advantage remains fragile in the absence of sustained improvements in service quality and institutional capacity.

Despite these strengths, Iran's health tourism sector faces several challenges. The absence of an integrated international marketing system, weak destination branding, lack of globally recognized hospital accreditation standards (such as JCI), and lengthy procedures for issuing medical visas are among the factors that hinder full exploitation of existing capacities. At a structural level, poor coordination among key stakeholders including the Ministry of Health, the Ministry of Cultural Heritage and Tourism, and the private sector sometimes leads to duplication of efforts and reduces the effectiveness of policies. Therefore, the genuine development of health tourism in Iran requires a comprehensive approach that encompasses improving service quality, enhancing health diplomacy with neighboring countries, and ensuring sustainable management of human resources and foreign exchange revenues.

2.4 The Impact of Exchange Rates and Currency Depreciation on Health Tourism

The exchange rate is widely recognized as one of the most influential economic variables affecting the tourism industry, as it directly shapes consumer behavior, travel costs, and tourist flows. A depreciation of the national currency reduces the relative prices of domestic goods and services for foreign visitors, thereby enhancing destination competitiveness [4]. This effect is particularly pronounced in the context of health tourism, where medical expenses constitute a substantial share of the total travel costs for international patients. Under such conditions, currency devaluation can significantly strengthen incentives for medical travel [16].

In the case of Iran, the depreciation of the rial in recent years has led to a marked reduction in the real cost of medical treatment for foreign patients. As a result, the prices of many surgical procedures and healthcare services, when denominated in foreign currencies, have become highly affordable for patients from neighboring countries [17]. This trend has contributed to increased inflows of patients from Iraq, Afghanistan, Azerbaijan, and the Persian Gulf region, particularly in medical fields such as cosmetic surgery, infertility treatment, and orthopedic care [15];[13]. However, alongside these economic opportunities, currency devaluation also imposes serious constraints on the domestic healthcare system. Rising costs of importing medical equipment, difficulties in procuring foreign pharmaceuticals, and escalating operational expenses for healthcare facilities are among the key challenges associated with a weakened national currency [18]. Furthermore, currency depreciation reduces the purchasing power of healthcare providers and places additional financial pressure on private hospitals. Consequently, the sustainability of Iran's price advantage may be threatened by declining service quality, equipment obsolescence, and revenue instability within medical centers.

Overall, the impact of exchange-rate fluctuations on health tourism is inherently dual in nature. On the one hand, currency devaluation can act as a catalyst for attracting foreign patients and increasing foreign exchange earnings. On the other hand, if not accompanied by supportive policies and economic stabilization measures, it may lead to deteriorating service quality and long-term instability in healthcare provision. For this reason, understanding the effects of exchange rates on health tourism requires a systemic perspective that simultaneously examines the interactions among the healthcare sector, currency markets, and economic policymaking. These opposing effects highlight the need for an analytical framework capable of capturing dynamic interactions and stakeholder experiences.

2.5 Economic Perspectives on Exchange-Rate Advantages in Health Tourism

The relationship between exchange rates and demand for health tourism can be coherently explained through several complementary economic theories. From these perspectives, national currency devaluation simultaneously generates a price advantage while also giving rise to potential structural constraints. Accordingly, any meaningful analysis must consider both the opportunities and challenges associated with exchange-rate dynamics.

According to the theory of Purchasing Power Parity (PPP), exchange rates between countries tend to adjust in the long run in a way that equalizes the price levels of goods and services once currencies are converted. When a country's national currency depreciates, the cost of its goods and services becomes relatively cheaper for foreign consumers, thereby increasing the purchasing power of international tourists [16]. In the context of health tourism, this mechanism implies that currency devaluation lowers the real cost of medical services for foreign patients, which can enhance the attractiveness of a medical destination.

From the perspective of supply and demand theory, medical services within the health tourism industry can be regarded as internationally tradable services. When exchange-rate movements reduce the relative price of these services in foreign currency terms, the demand curve for international patients effectively shifts upward. In other words, a greater number of patients become willing to choose that destination, as treatment costs decline relative to alternative countries [1]. However, this theoretical framework also emphasizes that price is not the sole determinant of demand. Factors such as service quality, patient safety, institutional reputation, and confidence in treatment outcomes play a critical role in shaping patients' decisions. Therefore, price reductions resulting from currency depreciation are effective only when minimum standards of quality and professional practice are maintained.

The theory of comparative advantage further explains why certain countries perform more successfully in the global health tourism market. According to this theory, countries should specialize in the production of goods and services in which they enjoy relative advantages in terms of cost, technology, and human resources. In health tourism, a country holds a comparative advantage if it can provide medical services of acceptable quality at lower costs than its competitors [6]. Currency devaluation may strengthen this comparative advantage by reducing the international price of healthcare services. However, if depreciation simultaneously increases the cost of importing medical equipment, pharmaceuticals, and consumables thereby placing pressure on service quality this advantage may prove temporary and unsustainable.

Taken together, these theoretical perspectives demonstrate that currency devaluation produces two simultaneous economic outcomes for health tourism. On the one hand, by enhancing the purchasing power of foreign patients and lowering the relative prices of medical services, it creates a price advantage that can stimulate demand and increase international patient inflows. On the other hand, rising input costs and financial pressures on healthcare providers may undermine service quality and strain medical infrastructure, thereby casting doubt on the long-term sustainability of this price advantage.

Accordingly, within this integrated theoretical framework, the effective utilization of exchange-rate advantages in health tourism depends on policy choices that extend beyond short-term price competitiveness. Policymakers must not only leverage lower prices to attract foreign patients but also reinforce service quality, protect the

healthcare system against exchange-rate shocks, and promote broader economic stability. Otherwise, currency-based advantages may evolve from a temporary opportunity into a structural constraint, ultimately threatening the healthcare system and the long-term development of health tourism. These theories provide an economic lens, but they are insufficient to capture institutional, managerial, and policy dynamics.

2.6 Literature Review

Health tourism has increasingly attracted scholarly attention within both tourism studies and health economics, reflecting its growing importance as a cross-sectoral industry. Domestic research indicates that Iran possesses several competitive advantages in attracting international patients, including a highly skilled medical workforce, comparatively low treatment costs, and geographical proximity to major source markets in neighboring countries. At the same time, these studies consistently point to persistent structural challenges, such as weak international marketing, infrastructural constraints, limited institutional coordination between the health and tourism sectors, and high exposure to economic fluctuations and international sanctions. Collectively, these factors raise concerns regarding the long-term sustainability of health tourism development in Iran [13];[19].

At the international level, a substantial body of literature demonstrates that economic considerations particularly treatment costs, quality of medical services, and the broader economic conditions of destination countries play a decisive role in health tourism destination choice [1];[20]. Building on this foundation, more recent studies have extended the analytical focus beyond cost advantages to emphasize perceived value, treatment-related risk, and economic stability as key determinants shaping international patients' decision-making processes [21];[22]. From a tourism economics perspective, relative prices and exchange rates are widely recognized as central mechanisms through which macroeconomic conditions influence tourism flows and destination competitiveness [25].

Another strand of the literature has increasingly focused on the role of macroeconomic dynamics particularly exchange rates, currency depreciation, and exchange rate volatility in shaping tourism and health tourism flows. Empirical studies suggest that currency depreciation can stimulate inbound tourism by enhancing price competitiveness and reducing the relative cost of services for foreign visitors. However, recent evidence indicates that exchange rate volatility, beyond exchange rate levels, significantly influences tourism inflows by increasing price uncertainty and perceived financial risk, thereby shaping travelers' expectations and timing of travel decisions [26];[27]. In the context of health tourism, quantitative analyses further demonstrate that exchange rate shocks can exert significant and sometimes asymmetric effects on medical tourism demand, underscoring the sensitivity of health-related travel to macroeconomic instability [28].

More broadly, recent theoretical contributions argue that traditional tourism demand models require reconsideration in light of macroeconomic shocks, structural changes, and heightened uncertainty in the global tourism system [29]. These dynamics are particularly salient for health tourism, where price advantages generated by currency depreciation may coexist with rising medical input costs, institutional pressures, and risks to healthcare system sustainability. Despite the growing body of empirical work, the existing literature remains largely dominated by quantitative approaches and macroeconomic indicators. In contrast, relatively few qualitative studies have examined the structural, managerial, and dynamic implications of currency devaluation for health tourism from the perspectives and lived experiences of key stakeholders. This gap underscores the need for qualitative, process-oriented research capable of capturing the complex and evolving interactions among economic forces, institutional structures, and stakeholder responses, thereby providing deeper insights to inform evidence-based and sustainable health tourism policies.

3. Research Methodology

This study aims to explore the capacities and limitations of health tourism development in Iran in the context of national currency depreciation. To achieve this objective, a qualitative research design based on the grounded theory approach was adopted. Grounded theory was selected to facilitate the systematic extraction of concepts and categories and to develop a conceptual framework grounded in empirical data. This approach is particularly appropriate given the multidimensional nature of health tourism development under exchange

rate volatility, which encompasses economic, managerial, and social dimensions and requires an in-depth understanding of stakeholders' perceptions and lived experiences. Following the Straussian grounded theory tradition [23]. this study adopts a systematic, multi-stage approach to concept development and theoretical integration.

The study population consisted of experts and key actors in the health tourism sector who are directly involved in the phenomenon under investigation. These included managers of hospitals receiving international patients, health tourism facilitators and intermediaries, physicians providing services to foreign patients, as well as selected policymakers and experts in the tourism and health sectors. Sampling initially followed a purposive strategy and subsequently evolved into theoretical sampling as data analysis progressed. Data collection continued until theoretical saturation was achieved, resulting in a total of 15 in-depth interviews. Theoretical saturation was reached when no new concepts emerged in subsequent interviews, and further data collection no longer contributed additional analytical depth. Participants were selected for their direct involvement and experiential knowledge of health tourism operations and policies.

Semi-structured, in-depth interviews served as the primary data collection instrument. An interview guide comprising open-ended and exploratory questions was developed to encourage participants to freely articulate their experiences and viewpoints. Interviews were conducted either in person or online, recorded with informed consent, and fully transcribed for analysis. Interviews lasted between 25 and 35 minutes on average, and all audio files and transcripts were anonymized and stored securely following ethical guidelines.

Data analysis was carried out following the three-stage coding procedure of grounded theory, including open, axial, and selective coding. During open coding, initial concepts were identified through line-by-line analysis of the interview transcripts. In the axial coding phase, related codes were compared and organized into higher-level conceptual categories, and relationships among causal conditions, contextual conditions, intervening factors, strategies, and outcomes were identified. In the selective coding stage, the main categories were integrated, the core category of the study was determined, and a conceptual model was developed to explain the dynamics of health tourism development under conditions of currency depreciation. Throughout the coding process, constant comparative analysis and analytic memo-writing were employed to refine categories and ensure the internal consistency of emerging relationships. Data were organized and coded using MAXQDA 2022 software.

To ensure the trustworthiness of the findings, the criteria proposed by Lincoln and Guba were applied. Credibility was enhanced through the selection of knowledgeable participants and by seeking feedback from selected interviewees on the preliminary findings. Transferability was strengthened by providing a relatively detailed description of the research context, study population, and analytical procedures. In addition, confirmability and dependability were ensured through thorough documentation of all stages of data collection and analysis and transparent reporting of the research process.

4. Research Findings

The analysis of data obtained from interviews with experts and practitioners in the field of health tourism was conducted using the grounded theory approach through three systematic stages: open coding, axial coding, and selective coding. The purpose of this analytical process was to extract key concepts and categories related to the capacities and constraints of health tourism development in Iran within the context of currency devaluation, and ultimately to develop a conceptual framework that explains this phenomenon

In the first stage of data analysis, the interview transcripts were examined line by line, and initial concepts were inductively derived from the data. This process led to the identification of a set of open codes reflecting participants' experiences and perceptions of the current state of health tourism in Iran. Prominent codes included reduced treatment costs for foreign patients, increased demand from patients in neighboring countries, price attractiveness of medical services, improved hospital profitability, pressure on healthcare system capacity, economic and exchange rate instability, weak international marketing, and administrative and infrastructural constraints. These initial codes served as the foundational meaning units for subsequent stages of analysis.

During the axial coding stage, the open codes were organized into broader categories based on conceptual similarities and relational patterns. The findings of this stage indicated that the extracted categories could be broadly classified into two overarching dimensions: capacities and constraints of health tourism development under conditions of currency devaluation. The identified capacities primarily encompassed the price advantage of medical services, increased inflows of foreign patients particularly from neighboring countries and the enhanced competitiveness of Iran in the regional health tourism market. In contrast, the main constraints included mounting pressure on the domestic healthcare system, economic and exchange rate instability, rising costs of imported medical equipment, and weaknesses in health tourism–related infrastructure. Overall, the findings highlight the dual nature of the phenomenon, characterized by the simultaneous presence of opportunities and challenges.

In the selective coding stage, the axial categories were integrated into a coherent explanatory structure, leading to the identification of the core category of the study, labeled "the duality of opportunity and pressure in health tourism development under currency devaluation." This core category captures the central dynamic of the phenomenon, whereby currency devaluation simultaneously creates a price-based competitive advantage and increased foreign patient demand, while also exerting structural and financial pressures on the domestic healthcare system and service delivery capacity. This section reports the empirical findings derived from the grounded theory analysis, focusing on the categories and relationships that emerged from the interview data.

4.1 Results of Open Coding

The results of the open coding stage revealed that, from the perspective of health tourism experts and practitioners, currency devaluation in Iran is a multidimensional phenomenon encompassing both enabling and constraining elements. Key concepts identified at this stage included reduced treatment costs for foreign patients, enhanced attractiveness of Iran relative to competing destinations, severe exchange rate volatility, rising costs of medical equipment, administrative bureaucracy, lack of integrated policymaking, and declining service quality due to increased demand pressures. These foundational concepts provided the analytical basis for the formation of higher-level categories in subsequent coding stages. As one interviewee noted, "The depreciation of the rial has made our medical services extremely affordable for patients from neighboring countries, but at the same time it has stretched hospital resources."

4.2 Results of Axial Coding

At the axial coding stage, the initial concepts were organized into more coherent analytical categories that reflect the causal, contextual, intervening, strategic, and consequential dimensions of the studied phenomenon. Several participants emphasized that the price advantage created by currency devaluation has been particularly influential in attracting patients from neighboring countries.

Axial Category	Main Components
Capacities	Price advantage, increased foreign demand
Constraints	Pressure on the healthcare system, rising costs
Contextual conditions	Structure of the healthcare system, infrastructure
Intervening conditions	Bureaucracy, visa restrictions, international perceptions
Strategies	Regional markets, flexible pricing
Outcomes	Foreign exchange earnings / healthcare inequality

Table 1. summarizes the main axial categories derived from the coding process and their key components.

1. Capacities for Health Tourism Development Arising from Currency Devaluation

The findings indicate that currency devaluation has generated significant capacity for attracting foreign patients by creating a strong price advantage. Reduced costs of medical, accommodation, and ancillary services have positioned Iran as a competitive destination compared to other countries in the region. This advantage is particularly pronounced in specialized medical fields such as advanced surgeries, various cancer treatments, infertility treatments, and dental services.

2. Constraints and Challenges of Health Tourism Development

Alongside economic opportunities, currency devaluation has also produced substantial constraints. Key challenges include increased costs of procuring medical equipment, difficulties in importing pharmaceuticals, heightened pressure on healthcare personnel, and reduced financial access to medical services for domestic patients. Moreover, persistent economic instability and exchange rate volatility have undermined long-term planning and investment in the health tourism sector.

3. Contextual Conditions Influencing Health Tourism Development

The findings suggest that contextual conditions such as the structure of the healthcare system, the status of tourism infrastructure, legal and regulatory frameworks, and the level of international engagement play a decisive role in transforming exchange rate advantages into sustainable health tourism development. Weak coordination among relevant institutions and the absence of coherent supportive policies were identified as major contextual constraints.

4. Intervening Factors in Leveraging Exchange Rate Advantages

Factors such as administrative bureaucracy, visa restrictions, the absence of unified international standards, marketing deficiencies, and international perceptions of the country function as intervening conditions that may weaken or even neutralize the positive effects of currency devaluation on health tourism development.

5. Actors' Strategies in Response to Currency Devaluation

According to the findings, actors in the health tourism sector have adopted strategies such as focusing on regional markets, relying on medical intermediaries, implementing flexible pricing mechanisms, and developing integrated medical–tourism packages to capitalize on favorable exchange rate conditions. These strategies are largely reactive and short-term in nature and are seldom embedded within a coordinated macro-level policy framework.

6. Economic and Structural Outcomes of Health Tourism Development

The identified outcomes include increased foreign exchange earnings, job creation, and the expansion of the private healthcare sector on the one hand, and increased inequality in access to healthcare services, intensified pressure on the domestic healthcare system, and heightened dependence on exchange rate fluctuations on the other. These dual outcomes underscore the complex and ambivalent nature of the phenomenon under study.

4.3 Core Category (Central Phenomenon)

At the selective coding stage, the duality of opportunities and pressures in the development of health tourism in Iran under conditions of national currency devaluation was identified as the core category of the study. This category captures the central dynamic through which national currency devaluation operates as the primary causal condition, simultaneously creating a price-based competitive advantage that attracts foreign patients

while generating structural, financial, and managerial pressures on the domestic healthcare system and its governance mechanisms.

Within the context of existing healthcare, geographical, and institutional capacities, and in interaction with intervening conditions such as economic volatility, international sanctions, and managerial weaknesses, this duality gives rise to the core phenomenon shaping health tourism development in Iran. In response, key actors adopt strategies including the development of specialized medical services, strengthening institutional cooperation, and expanding regional marketing efforts, which ultimately lead to diverse economic and social outcomes for both the healthcare system and the national economy.

This duality therefore provides the central explanatory logic linking causal conditions, contextual and intervening factors, actors' strategies, and outcomes, and constitutes the analytical axis of the study's grounded theory model.

Paradigmatic Model Dimension	Category	Examples of Open Codes
Causal conditions	Depreciation of the national currency	Devaluation of the Iranian rial, increase in exchange rates, exchange rate differentials with neighboring countries
Core phenomenon	Duality of opportunities and pressures in health tourism	Creation of economic advantages alongside pressure on healthcare resources, market expansion accompanied by structural challenges
Contextual conditions	Healthcare and health tourism infrastructure	Availability of well-equipped hospitals, access to paraclinical services, development of international hospitals
Intervening conditions	Economic instability	Severe exchange rate fluctuations, market unpredictability, investment risk
Action/interaction strategies	Regional marketing development	Promotion in target countries, use of digital marketing
Consequences	Enhanced regional competitiveness	Strengthening Iran's position in the regional medical tourism market

Table 2. illustrates how selected open codes and axial categories were integrated within the dimensions of the paradigmatic model during selective coding.

4.4 Selective Coding and Development of the Conceptual Model

The categories derived from axial coding were integrated at this stage, and the core category of the study was identified. Based on the data analysis, the core category was conceptualized as "the duality of opportunities and pressures in the development of health tourism in Iran under conditions of national currency devaluation." This category indicates that the depreciation of the national currency, on the one hand, creates a price-based competitive advantage that increases demand from foreign patients, and on the other hand, imposes pressures on the domestic healthcare system and treatment infrastructure.

To explain the relationships among the categories, the conceptual model of the study was developed based on the paradigmatic model of grounded theory. In this model, currency devaluation and price differentials in medical services are identified as causal conditions which, in interaction with contextual and intervening conditions, shape the strategies adopted by actors in the health tourism sector and lead to outcomes such as increased foreign exchange earnings and enhanced regional positioning of health tourism, alongside growing pressure on certain segments of the domestic healthcare system. These findings demonstrate that the development of health tourism in this context requires balanced policymaking and effective management.

Category	Concept	Sample Open Codes
Economic capacities	Price advantage of medical services	Reduced treatment costs for foreign patients
Market capacities	Growth in demand	Increase in regional patients
Treatment capacities	Quality of medical services	Availability of skilled and experienced physicians
Economic constraints	Economic instability	Exchange rate fluctuations
Development strategies	Improvement of health tourism services	Development of specialized services for foreign patients
Managerial constraints	Lack of marketing strategy	Weak international marketing

Table 3. Coding of Research Data (Based on Grounded Theory)

4.5 Conceptual Model of the Study

Based on the paradigmatic model of grounded theory [23], The study's conceptual model was developed to explain the dynamics of health tourism development in Iran under conditions of national currency devaluation. As illustrated in Figure 1, the devaluation of the national currency and the widening price differentials in medical service costs between Iran and neighboring countries constitute the primary causal conditions, creating a price advantage that stimulates demand from foreign patients.

These causal conditions operate within a contextual environment shaped by the capacity of hospitals and medical centers, the availability of specialist physicians, tourism and healthcare infrastructure, and Iran's geographical position in the region. They interact with intervening conditions such as severe economic and exchange-rate volatility, international sanctions, weak intersectoral coordination, and the absence of an integrated health tourism management system.

This interaction gives rise to the core phenomenon of the study: the duality of opportunity and pressure in the development of health tourism under conditions of national currency devaluation. In response, actors adopt strategies including the expansion of services for foreign patients, strengthened cooperation between the tourism and healthcare sectors, regional marketing, and the development of supportive government policies.

The implementation of these strategies leads to dual outcomes: on the one hand, increased foreign exchange earnings, market development, and enhanced regional competitiveness; and on the other, increased pressure on the domestic healthcare system and rising costs of healthcare services for domestic patients. Taken together, the conceptual model demonstrates that health tourism development in the context of currency devaluation is a multidimensional and dynamic process that requires coordinated management and balanced policymaking to maximize benefits while mitigating systemic pressures.

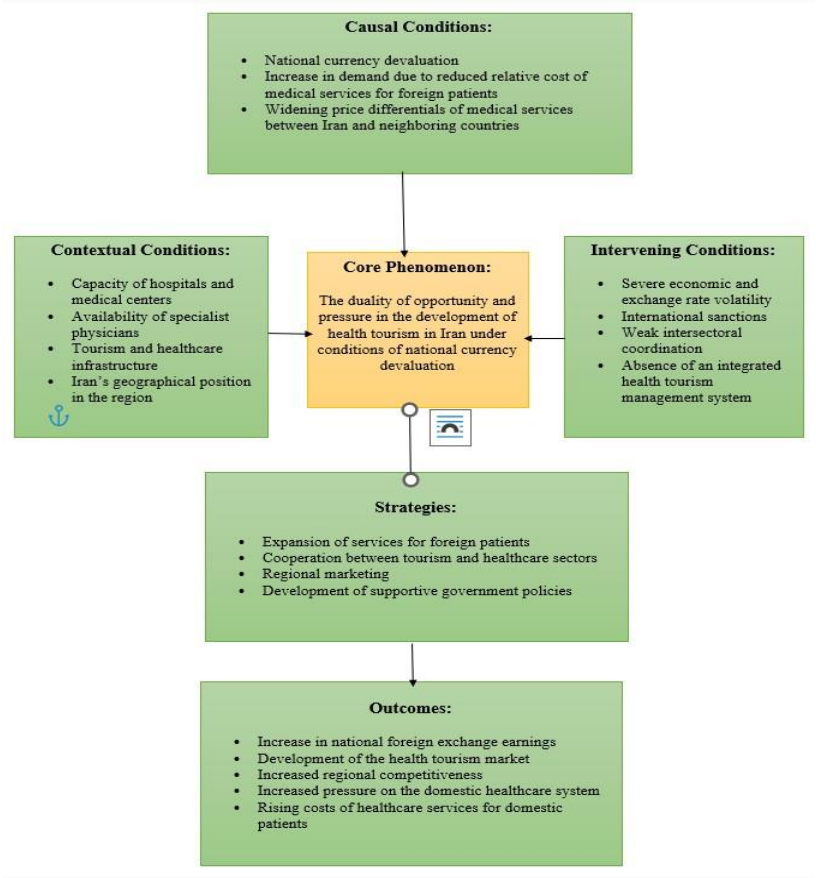

Figure 1. Conceptual Model of Health Tourism Development in Iran under National Currency Devaluation Based on the Grounded Theory Paradigmatic Model

5. Discussion

The aim of this study was to explain the consequences of national currency devaluation for the development of health tourism in Iran using a grounded theory approach. The findings indicate that, contrary to prevalent one-dimensional interpretations, currency devaluation is a multifaceted and processual phenomenon that can simultaneously function as an economic opportunity and a structural pressure on the health and tourism systems. The identification of the core category the duality of opportunity and pressure in health tourism development reveals that the development of this sector is not driven by price advantage alone, but rather emerges from the complex interaction among causal conditions, contextual conditions, intervening conditions, actors' strategies, and outcomes. By conceptualizing this process through a grounded theory lens, the study moves beyond linear economic explanations and provides a relational understanding of how macroeconomic shocks are translated into sectoral dynamics in health tourism.

The findings indicate that the devaluation of the national currency has increased demand for Iran's medical services by creating a substantial price advantage for foreign patients. This finding is consistent with studies by Connell (2016, 2023) and Lunt and Horsfall (2020), who emphasize the role of exchange rate differentials and treatment cost gaps in shaping cross-border patient mobility. More broadly, this pattern reflects findings from studies on health tourism in developing economies, which identify exchange rate differentials as an important though insufficient driver of cross-border patient flows. However, the findings also demonstrate that price advantage alone is insufficient for the sustainable development of health tourism. Only when supported

by adequate healthcare infrastructure, service quality, and institutional coordination can such an advantage be transformed into a durable competitive position.

At the same time, the findings highlight the presence of considerable pressures and constraints arising from currency devaluation, including rising costs of imported medical equipment, increased pressure on human resources within the healthcare system, and the intensification of inequalities in access to medical services for domestic patients. These results align with strands of the critical health tourism literature that emphasize the negative consequences of uncontrolled expansion in this sector for domestic healthcare systems. However, by conceptualizing these pressures as a core category and situating them in relation to other conditions, the present study offers a deeper understanding of the structural nature of these challenges. By framing these pressures as an integral component of the core phenomenon rather than as peripheral side effects, the study advances a more structural understanding of the contradictions inherent in health tourism development under conditions of economic instability.

One of the study's key findings is the decisive role of contextual and intervening conditions in shaping the outcomes of currency devaluation. Factors such as the structure of the healthcare system, institutional capacities, tourism infrastructure, regulatory stability, international perceptions of the country, and the effectiveness of marketing systems can either amplify or neutralize the opportunities generated by currency-based advantages. This finding challenges simplistic perspectives that view the development of health tourism merely as a direct outcome of currency depreciation and instead highlights the importance of governance and coordinated policymaking. Accordingly, the findings point to the need for governance arrangements and regulatory frameworks that actively mediate the effects of currency devaluation rather than assuming that market forces alone will generate desirable outcomes.

At the strategic level, the findings show that actors in the health tourism sector are actively adapting to economic instability by adopting strategies such as focusing on regional markets, developing specialized services, implementing flexible pricing mechanisms, and strengthening cooperation between the health and tourism sectors. However, the findings suggest that these strategies are not equally accessible to all actors and are highly contingent upon institutional support, regulatory clarity, and the availability of organizational resources. While these findings are consistent with the literature on adaptive strategies under conditions of economic uncertainty, the present study demonstrates that the effectiveness of such strategies is highly dependent on the reduction of institutional barriers and the improvement of intervening conditions.

Overall, this study suggests that national currency devaluation should be understood as a dual phenomenon encompassing both opportunities and pressures. By elucidating the mediating role of institutional and perceptual conditions, the findings indicate that transforming currency-based advantages into developmental outcomes in health tourism is neither linear nor automatic, but rather contingent upon complex interactions among structures, policies, and actors. In this regard, the study provides an analytical framework that offers deeper insight into the dynamics of health tourism development in economies characterized by exchange rate volatility. The results further indicate that the effective and sustainable utilization of health tourism opportunities under such conditions requires a balanced, long-term approach grounded in coordinated, cross-sectoral policymaking. The study contributes to health tourism scholarship by theorizing the dual role of currency devaluation, demonstrating the mediating function of institutional and perceptual conditions, and offering a grounded analytical framework applicable to other economies experiencing exchange rate volatility.

6. Conclusion and Implications

Drawing on a grounded theory approach and the paradigmatic model of Strauss and Corbin, this study examined the consequences of national currency devaluation for the development of health tourism in Iran. The findings demonstrate that currency devaluation is not a one-dimensional phenomenon, but rather a complex and multi-level process that can simultaneously create opportunities for attracting foreign patients while generating pressures on the country's economic, institutional, and healthcare structures. The identification of the core category the duality of opportunities and pressures in health tourism development

highlights that the development of this sector under conditions of exchange rate volatility requires a comprehensive understanding of the interaction among economic, institutional, and managerial factors.

The findings further indicate that the price advantage resulting from currency devaluation can contribute to the sustainable development of health tourism only when supported by adequate healthcare infrastructure, service quality, and institutional coordination. In the absence of these conditions, price-based advantages may instead lead to adverse outcomes, including increased pressure on healthcare system resources, heightened inequalities in domestic patients' access to medical services, and greater dependence on unstable economic conditions. Consequently, health tourism development in such contexts calls for a balanced approach that simultaneously considers economic benefits and the requirements of equity and sustainability within the healthcare system.

From a theoretical perspective, this study contributes to the health tourism literature in economies characterized by exchange rate volatility by proposing a process-oriented conceptual model. By conceptualizing currency devaluation as a dual opportunity–pressure phenomenon and explicating the role of contextual and intervening conditions in shaping its outcomes, the study offers an analytical framework that can inform future research and be applied to other countries facing similar economic circumstances.

Finally, the results suggest that effective policymaking in the health tourism sector under conditions of currency devaluation requires a long-term perspective, strong institutional coordination, and proactive management of potential negative consequences. Without such an approach, the pursuit of short-term economic gains may undermine the sustainability of the healthcare system and ultimately erode long-term developmental benefits. Taken together, these findings emphasize that health tourism development under conditions of currency devaluation cannot be reduced to short-term economic calculations, but must be understood as a structurally embedded and policy-sensitive process.

6.1 Policy and Managerial Implications

The findings of this study indicate that policymaking in the health tourism sector should not rely solely on the price advantage generated by national currency devaluation. In particular, policymakers should prioritize the alignment of pricing policies, patient admission regulations, and capacity planning mechanisms to prevent the diversion of critical healthcare resources away from domestic populations. Instead, effective development requires the design of integrated policies across the health, tourism, and economic sectors, the establishment of regulatory frameworks to safeguard domestic patients' access to healthcare services, and targeted investment in healthcare and tourism infrastructure.

Managers of healthcare facilities and health tourism providers can capitalize more effectively on existing opportunities by focusing on service quality enhancement, the development of specialized medical services, improvement of the overall experience of international patients, and the strengthening of intersectoral collaboration. Moreover, proactive human resource management and the prevention of excessive pressure on domestic healthcare capacities play a critical role in ensuring the long-term sustainability of the health tourism sector.

6.2 Limitations and Directions for Future Research

Like other qualitative studies, this research is subject to certain limitations. Limited access to some experts and key stakeholders in the health tourism sector particularly under conditions of economic instability constituted one of the main challenges of the study. In addition, the specific economic and institutional context of the country at the time of data collection may have influenced participants' perceptions and experiences. These limitations also highlight the dynamic and evolving nature of health tourism systems, suggesting that stakeholders' interpretations may shift as economic and institutional conditions change over time.

Given the qualitative and context-dependent nature of the present study, direct generalization of the findings to other countries or time periods should be approached with caution. Accordingly, future research is

encouraged to employ longitudinal data, quantitative methods, or comparative approaches to examine the dynamics of health tourism development under varying economic conditions, and to further test and refine the conceptual model proposed in this study.

REFERENCES

[1] *Connell, J. (2006). Medical tourism: Sea, sun, sand and… surgery. Tourism Management, 27(6), 1093-1100.*

[2] *Yu, J., Ko, T., & Lee, C. (2022). The development and challenges of medical tourism: Evidence from Asia. Asia Pacific Journal of Tourism Research, 27(6), 605–620.*

[3] *Croes, R., & Rivera, M. (2023). Tourism economics and destination competitiveness. Journal of Travel Research, 62(3), 531–545.*

[4] *Dogru, T., Bulut, U., & Sirakaya-Turk, E. (2022). The nexus between exchange rates and tourism demand. Tourism Economics, 28(5), 1205–1224.*

[5] *Agiomirgianakis, G., Serenis, D., & Tsounis, N. (2022). Exchange rate volatility and tourism demand: Evidence from international tourism flows. Tourism Management Perspectives, 41, 100938.*

[6] *Demir, E., Gozgor, G., & Paramati, S. R. (2021). Does economic policy uncertainty affect tourism? Evidence from OECD countries. Annals of Tourism Research, 89, 103210.*

[7] *Song, H., Li, G., & Cao, Z. (2022). Tourism demand modelling and forecasting: A review of recent research. Tourism Management, 88, 104438.*

[8] *Jabbari, A., Delgoshaei, B., Mardani, R., & Tabibi, S. J. (2021). Medical tourism in Iran: Issues and challenges. International Journal of Travel Medicine and Global Health, 9(1), 1–6.*

[9] *Goodarzi, M., Haghtalab, N., & Shamshiry, E. (2022). Medical tourism development in Iran: Opportunities and barriers. Journal of Tourism Analysis: Revista de Análisis Turístico, 29(2), 121–136.*

[10] *Kazemi, Z., & Janati, A. (2023). Factors affecting medical tourism development in Iran: A systematic review. BMC Health Services Research, 23, 1034.*

[11] *Lunt, N., Horsfall, D., & Hanefeld, J. (2020). Medical Tourism: Treatments, Markets and Health System Implications. OECD Publishing.*

[12] *Hanefeld, J., Lunt, N., Smith, R., & Horsfall, D. (2021). Why do medical tourists travel? A systematic review of the literature. Social Science & Medicine, 124, 62–72.*

[13] *Ghasemi, P., Mehdiabadi, A., Spulbar, C., & Birau, R. (2021). Ranking Sustainable Medical Tourism Destinations in Iran. Sustainability, 13(2), 683.*

[14] *Bookman, M. Z., & Bookman, K. R. (2009). Medical Tourism in Developing Countries, 2007. New York and Hampshire: Palgrave Macmillan.*

[15] *Mosadeghrad, A. M., & Sadeghi, M. (2021). Medical tourism: Reasons for choosing Iran. Payesh (Health Monitor), 20(2), 145-166.*

[16] *Krugman, P. R., Obstfeld, M., & Melitz, M. J. (2018). International economics: Theory and policy (10th ed.). Pearson Education.*

[17] *Tung, L. T., & Thanh, P. T. (2022). The impact of exchange rate fluctuations on medical tourism demand: Evidence from Asian emerging markets. International Journal of Healthcare Management, 15(3), 251–260.*

[18] *Amirian, S., Ahmadi, A. M., Arani, A. A., & Abbasian, E. (2022). Systematic risk in Iran's medical tourism industry: A narrative review.Iranian Journal of Public Health, 51(9), 1950–1958.*

[19] *Zarei, A., & Maleki, F. (2019). Asian medical marketing, a review of factors affecting Asian medical tourism development. Journal of quality assurance in hospitality & tourism, 20(1), 1-15.*

[20] *Smith, P. C., & Forgione, D. A. (2007).Global outsourcing of healthcare: A medical tourism decision model. Journal of Information Technology Case and Application Research, 9(3), 19–30.*

[21] *Han, H., Lee, K. S., Chua, B. L., Lee, S., & Kim, W. (2020). Role of medical tourism quality, satisfaction, trust, and behavioral intention. Journal of Travel & Tourism Marketing, 37(4), 409–422.*

[22] *Abubakar, A. M., Ilkan, M., Al-Tal, R. M., & Eluwole, K. K. (2021). eWOM, revisit intention, destination trust, and gender. Journal of Hospitality and Tourism Management, 48, 317–327.*

[23] *Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Sage Publications.*

[24] *Connell, J. (2023). Medical tourism: Concepts, contexts and challenges. Tourism Management Perspectives, 46, 101086.*

[25] *Dwyer, L., Forsyth, P., & Dwyer, W. (2020). Tourism Economics and Policy (2nd ed.). Channel View Publications.*

[26] *Bhatia, S., et al. (2024). Exchange Rate Volatility and Tourism Inflows. Tourism Economics, 30(1), 75–96.*

[27] *Rookayyah, I., Seetanah, B., Nunkoo, R., & Jaffur, Z. K. (2024). The impact of exchange rate and exchange rate volatility on tourism demand using disaggregated data. International Journal of Tourism Research, 26(2), e2640.*

[28] *Gündoğan, H., Coşkun, K., & Çelik, S. (2024). Impact of Exchange Rate Shocks on Health Tourism Using SVAR. Erciyes University Journal of Economics and Administrative Sciences, 71, 33–40.*

[29] *Dogru, T., Sirakaya-Turk, E., & Crouch, G. I. (2020). Remodeling international tourism demand: Old theory and new evidence. Tourism Management, 78, 104080.*

Appendix

Appendix A. Transformation of Open Codes into Paradigmatic Model Categories

Paradigmatic Model Dimension	Category	Sample Open Codes
Causal conditions	National currency devaluation	Depreciation of the rial, increase in exchange rates, exchange rate differentials with neighboring countries
Core phenomenon	Duality of opportunity and pressure in health tourism	Creation of economic advantages alongside pressure on healthcare resources; market expansion accompanied by structural challenges
Contextual conditions	Tourism and healthcare infrastructure	Availability of well-equipped hospitals, access to paraclinical services, development of international hospitals
Intervening conditions	Economic instability	Severe exchange rate volatility, market unpredictability, investment risk
Strategies	Development of regional marketing	Advertising in target countries, use of digital marketing
Outcomes	Increased regional competitiveness	Strengthening Iran's position in the regional medical tourism market

Sample Open Codes – Concepts – Axial Categories

Axial Category	Concept	Sample Open Codes
Economic capacities	Price advantage of medical services	Reduced treatment costs for foreign patients
Economic capacities	Cost competitiveness	Significant cost differences between Iran and neighboring countries
Market capacities	Growth of regional demand	Increase in patient inflows from neighboring countries
Market capacities	Strengthening competitive advantage	Iran's economic attractiveness for foreign patients
Medical capacities	Quality of medical services	Availability of skilled and experienced physicians
Medical capacities	Medical infrastructure	Presence of specialized hospitals
Geographical capacities	Regional accessibility	Iran's favorable geographical location
Structural constraints	Economic instability	Currency fluctuations
Social constraints	Social consequences	Rising healthcare costs for domestic patients
Economic constraints	Economic instability	Severe exchange rate volatility
Political constraints	International sanctions	International sanctions
Institutional constraints	Administrative barriers	Difficulties in issuing visas for foreign patients
Managerial constraints	Marketing deficiencies	Weak international marketing
Managerial constraints	Institutional coordination gaps	Lack of an integrated health tourism management system
Development strategies	Enhancement of health tourism services	Development of specialized services for foreign patients

Development strategies	Institutional networking	Cooperation between hospitals and tourism companies
Development strategies	Policy support	Government supportive policies
Development strategies	Regional marketing	Expansion of marketing activities in target countries