



Trabajo Fin de Grado

Grado en Fisioterapia

Canary Islands as a Health Tourism destination

Islas Canarias como destino de Turismo de Salud

Natalie Elizabeth Horgan

Curso 2015/2016 - Septiembre





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Abstract

<u>Introduction</u>: The Canary Islands was considered as a health tourism destination for centuries, thanks to its ideal climate helping many illness. But their location has been one of the difficulties that has prevented an increase in some tourist coming to these islands

<u>Objectives</u>: To determine if the Canary Islands are still in the XXIst century a major Health tourism destination in today's emerging medical tourism market. And also analyse the effects that the Brexit vote will have on health tourism to these islands.

<u>Material and Methods</u>: A search for articles, books and information containing the keywords health tourism, Canary Islands, doctors and Tenerife was carried out, using Pubmed, Google Scholar and Elsevier. And after applying inclusion and exclusion criteria. The remaining articles were used.

Results and discussions: The search came back with evidence that the Canarias have received visits from renowned doctors and travellers, some seeking health treatments and others just passing through. Another finding was that, even though a lot of medical related traveller recommended the canary isles as a good destination for health reasons, it took a long time for patients to come to the Canarias because of the lack of decent and fast transport and also the rejection from the locals of sick foreigners for fear of catching some of the diseases. During many decades, even centuries, the Canary Islands have played an important role in health tourism, mainly because of its warm and dry climate.

<u>Conclusion</u>: Nowadays, the Canaries are a popular health tourist destination, but more can be done to attract even more tourist.

Key words: Health tourism, Canary Islands, doctors, Tenerife, Spain

Resumen

<u>Introducción</u>: Las Islas Canarias han sido consideradas como un destino de turismo de salud durante siglos, gracias a su clima ideal ayudando a muchas patologías. Sin embargo, su ubicación ha sido una de las dificultades que ha impedido el aumento de turistas que vienen a estas islas.

<u>Objetivos</u>: Determinar si las Islas Canarias se encuentran todavía, en el siglo XXI, como un importante destino de turismo de salud en el mercado emergente de turismo médico de hoy. Y también analizar los efectos que el voto Brexit tendrá en el turismo de salud a estas islas.

<u>Material y Métodos</u>: Una búsqueda de artículos, libros y la información que contiene el turismo palabras clave de la salud, Islas Canarias, Tenerife médicos y se llevó a cabo, mediante PubMed, Google Scholar y Elsevier. Y después de aplicar los criterios de inclusión y exclusión. Se utilizaron los artículos restantes.

Resultados y discusión: La búsqueda regresó con evidencia de que las Canarias han recibido la visita de reconocidos médicos y viajeros, algunos tratamientos de salud y otros que buscan solo de paso. Otro hallazgo fue que, a pesar de que una gran cantidad de viajero relacionado con la medicina recomienda las islas Canarias como un buen destino por razones de salud, se tardó mucho tiempo para que los pacientes llegan a la Canarias debido a la falta de transporte decente y rápido y también el rechazo de los locales de los extranjeros enfermos por temor a contraer algunas de las enfermedades. Durante muchas décadas, incluso siglos, las Islas Canarias han jugado un papel importante en el turismo de salud, principalmente debido a su clima cálido y seco.

<u>Conclusión:</u> En la actualidad, las Islas Canarias son un destino turístico popular de salud, pero se puede hacer más para atraer aún más turistas.

Palabras clave: turismo de salud, Islas Canarias, médicos, Tenerife, España

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1. Introduction

1.1. Justification

The Canary Islands have been considered health resort since the time of the ancient Greeks, thanks to the healing effects of the climate. Not only did the Greeks travel to the Canaries, but also the Phoenicians, the Carthaginians and the romans did too. Proof of this is in the book written by Pliny the Elder called "*Natural History*" where he describes the islands in a non-mythological way and they are given the name of Fortunate Islands.

Because of its location in the Atlantic Ocean, south-west of Spain and north-west of Africa, directly in front of the coast of Morocco, the Canary Islands have been always an important station for navigation between Europe, Asia and America.

But also as a result of the distance between the Canary Islands and the European continent and the lack of fast and efficient transport methods not many people travelled to the Spanish archipelago to receive treatment of any kind or for holiday purposes until the 18th-19th century. Even though the Canary Islands an ideal place for patients looking to receive treatment and discover the beautiful natural habitat of the islands.

In this project, the aim is to prove if the Canary Islands are considered as a medical Tourism destination. For that purpose, gather information from various articles and search for any mention of any of the Canary Islands used for healing or the cure of diseases from any doctor, naturalist, from any country throughout the ages.

1.2. Health Tourism

Originally the term health tourism referred to the journey of patients from less developed to developed countries in search of treatments not available in their homeland countries.

But nowadays, the rich people go to less developed countries in search of cheaper medical service in their country, driven by the availability of cheap flights and information available to the consumer through marketing and online websites.

It is given the name of tourism because the medical tourists can use the trip to go sightseeing, hiking or participate in any traditional tourist activity. For the individuals interested in medical services, the cost is the key factor involved in the decision to seek medical care abroad. As the cost of healthcare in the US and other developed countries are too high, and many insurance companies are beginning to see health tourism as a remedy to reduce the price in those countries.

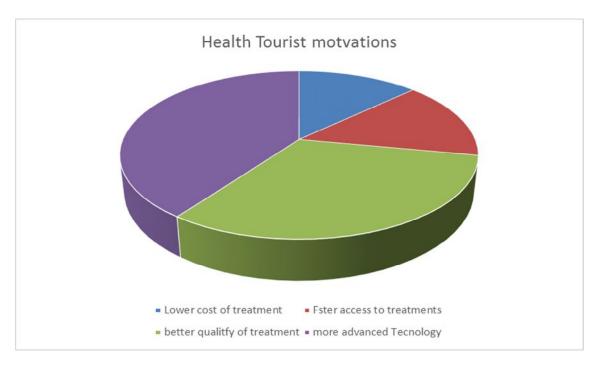
Increasingly you can appreciate the financial benefits of this emerging market, thereby providing better health services for lower significantly prices.

The reason that hospitals and clinics in developing countries are able to lower their prices is directly related to the economic status of the nation. Direct correlation with per capita gross domestic product of countries it at a proxy for income levels. Consequently, the prices of services are from 30% to 70% lower in countries that are rising in medical tourism compared to US.

One of the key barriers to validate medical tourism is the opinion of inadequate quality. A key to overcoming it focuses on using marketing strategies and an assessment of adequate quality through accreditation from an internationally recognized institution. Such accreditation is crucial to enhance confidence in the quality of health care. This confidence can be even stronger if the accreditation is followed by an affiliation with hospitals or health systems with good reputation in industrialized countries. Once healthcare providers are accredited and become a part of international referral networks, they can properly be classified for risks.

1.2.1. Health tourist

A health tourist is a person traveling in search of medical treatment. For an authentic medical tourist, that is, whose primary motivation seeking health care, has the following reasons¹⁰:



Source: self-made

- Availability. That the health services sought are not available in the
 place of origin of the tourist. This availability may be quantitative (waiting
 lists) or qualitative terms (geographical proximity, better quality of
 treatment in the destination country, most advantageous legislation, etc.).
- Possibility of funding. Affordable treatment in the country of destination. In these cases two situations may occur. The first is that treatment is affordable economically and patients come to realize the target, even with some kind of health insurance in the country, since the intervention might not be covered by the same or be subject to copayment. Another possible scenario is that do not have any health insurance and the costs of intervention in the place of origin become prohibitive access to the necessary intervention.
- Cultural aspects. Familiarity, which may be generally related to two main factors: geographical or cultural. Geographically, immigrants in any country can seek treatment in the country they consider home and not in the country where they live. Culturally they can search the affinity on issues such as language, religion, and so on.
- Perceived quality. A motivation is perceived quality. Treatment is not defined by any objective element (certification of medical specialists, certification of the hospital, etc.), but by the way be perceived quality: go

- to places where there are pioneering treatments or experts in some area of expertise, and so on.
- **Regional integration**. As certain areas of the world are integrated into joint policies that relax the borders, people move easily from one country to another, which encourages mobility to access health services.

1.2.2. Exclusions

Excluded from health tourism are the international tourists or residents who receive health services in a country of which they are not citizens but did not move for this reason, therefore they are not considered health tourists. This is a foreigner who resides in that country or tourist who receives medical treatment because of an accident or unexpected illness. There must be a willingness and desire to travel treatment.

1.2.3. Most demanded medical specialities

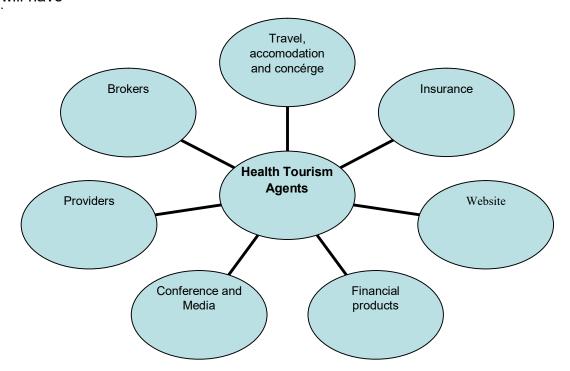
The most demanded medical procedures worldwide rely heavily on the home country of the patients (the price of treatments in your country, the health insurance coverage they have or culture, among others). The most popular treatments worldwide are¹⁰:

- Cosmetic Surgery, where there are two large flows of patients:
 - From countries like Jordan, Nicaragua, Costa Rica, Turkey, Mexico, Korea, Taiwan and Thailand, among others, are those tending to produce the current movements of resident patients in developed countries in search of treatments in countries developing country. This is mainly because the costs thereof are significantly lower in the latter. The main source market of cosmetic surgery patients, to these destinations is the United States.
 - Or from countries such as Germany, and England, who come to countries like Spain, seeking cosmetic surgery, mainly due to lower cost treatments.
- Dental treatments, stand where, as in the case of cosmetic surgery, certain developing country, which have somewhat lower treatment costs.
- Cardiac Surgery, which include countries like India, which receives many patients from Middle Eastern countries, in search of certain cardiovascular procedures. The main reasons for this flow are three
 - The lower cost of treatment (compared to countries like the United States).
 - Patients Middle Eastern travel less to the United States since the attacks of 9-11

- Orthopaedic Surgery, which include countries such as Thailand, Taiwan, Germany and India.
- Assisted Reproduction Treatments, where highlights Spain.
- As the price is one of the main factors determining the choice of destination, it is worth noting the differences between the main treatments, depending on the country, as shown in the following table, which can be seen as the US is the Country with a higher cost for almost all treatments, except for some such as dental and vision, which have a higher cost in countries like Korea or Israel.

1.2.4. Health tourism agents

According to the OECD (organization of economic cooperation and development) reports agents of interest in health tourism are varied, although as it is an emerging industry, it remains to define what role and importance each will have 10



Source: self-made.

It is a variety of health services and tourism services supplies, including the usual intermediaries in the tourism sector (transport, travel agencies, tour operators) and intermediaries in the health sector (health insurers, financiers treatments).

- The individual search for health services.
 - Experts and service providers of health tourism agree that the main way of attracting customers is the Internet. Regardless of the

motivation of the patient, the most common is that, individually, tourists use search engines on the Internet to seek treatment. In this regard it is essential that the corporate websites of health centres have adequate accessibility (languages) and good search engine rankings.

- On the other hand, it may be interesting that the centres are integrated into the databases of specialized web spaces, which can often be found on the network.
- Although there isn't significant presence in social networks, it is estimated that it may be important in the future because in the health product reputation can be an essential element of sale.

1.2.5. Medical tourism facilitator.

The facilitator of medical tourism is undoubtedly the most important in todays channel offering health tourism in international business environment. Sometimes referred to as "medical tourism agencies" offer various health services for patients apart from those found in their home countries, complementing the offer with a set of complementary tourist services that include from management travel and accommodation to information on other cultural services, nature trails, etc.¹⁰

Medical Tourism Facilitators have played an important role in promoting the growth of medical tourism. Through these agencies, patients receive their first impression and direct contact with medical tourism. In the last three or four years, thousands of these companies have emerged, most with names that relate to travel and health.

The scope of services is varied. Some facilitators only connect the patient with service providers; others manage and accompany the patient throughout the journey. In this sense, the trend is to offer packages with closed and public prices, in which the visa and passport management is included, travel, accommodation, accompaniment (interpreter, transfers, etc.), the provision of health and some tourist services. In this way, the user can find all the services needed for a treatment one place.

In theory, the facilitator ensures the quality and safety of health care providers, known doctors and other service providers, so that somehow, can offer some guarantee, although in most cases the requirements are not clear. They will also provide integrated health professionals in their offer. Some organizations have even created their own standards of quality / safety.

Some facilitators provide safe travel assistance, funding for treatment itself or insurance in the case of adverse effects requiring an extension of stay or other unforeseen costs. Ensure reimbursement in case of incidents: loss of transport, treatment complications and complications in the post treatment (rehabilitation or cures a posteriori).

Most medical facilitators found on the Internet are foreign and precisely these facilitators are aimed at attracting patients from their countries of origin.

1.3. Physiotherapy in Health Tourism

Physiotherapy is one of the disciplines most commonly used in the health tourism, or rather, physiotherapy falls within the portion of welfare and "wellness" offered by many companies offering services in the field of health tourism.

When we speak of physiotherapy, we refer to a regulated profession, therefore, it has specific rules that determines and defines the content and scope of the acts of it.

Physical therapy is the application of physical media for therapeutic purposes. It is a non-drug alternative to treat multiple illnesses, acute and chronic, through physical processes such as cold, heat, massage, exercise, light, etc. Physical therapy is responsible for maintaining, restoring or improving the functionality of the human body movement, which has been lost, decreased or at risk of being lost. Therefore, it has an important role in the prevention of musculoskeletal diseases, not just treatment.

Definition of physiotherapy according to WHO, "the art and science of treatment by therapeutic exercise, heat, cold, light, water, massage and electricity. In addition Physiotherapy includes the execution of electrical tests and manuals to determine the value of affectation and muscular strength tests to determine functional capabilities, the range of motion and measurements of vital capacity, as well as diagnostic aids control evolution". Therefore, there it is a discipline that not only focuses on the application of the technique but also the diagnostic and the physiotherapeutic evolution.

There is another fast growing demand (especially European centre-level) and dealing with the search for preventive health programs or recovery of ailments while the tourist is on vacation. These treatments are grouped into what are known as medical wellness, other therapeutic and rehabilitation treatments for ailments and even more specific preventive treatment, with particular attention to dietary and psychological counselling.

Wellness tourism in Spain has grown from a fast, to the point that it has become an important source of business, perhaps because it combines perfectly with other types of tourism products such as sun and beach, cultural, etc.

There are a variety of integrated services usually include treatments with thermal waters, thalassotherapy, SPA, sports activities, water and a number of services associated with the idea of welfare, such as:

- Auxiliary Cosmetic services.
- Auxiliary services hairdresser.
- Barber.
- Aesthetic hygiene services, waxing and makeup.
- Hydrothermal.
- Personal Image.
- Aesthetic care of hands and feet.
- Aesthetic massages and associated sensory techniques.

The following highlights the main types of welfare health services.

Thermal Medicine.

In recent years, fuelled by social changes and stressful situations which is under the current society has extended the offer of spas. The offer does not respond only to a therapeutic end, but as an option to take a break and spend a few days rest and fitness. However, approximately 65% of spas users for therapeutic reasons. A Spa or Thermal Station facility that has medicinal mineral waters declared Public Utility, medical services and adequate facilities to carry out the treatments prescribed. Its use, therefore, is focused on health and wellness, either both to treat ailments such as to prevent them.

- Thermal medicine is the medical branch that used for therapeutic and rehabilitation purposes means of thermal cure. For this reason it is considered as a medical discipline. Indeed, the means of thermal cure specific therapy have demonstrated their validity with scientific methods, and increasingly integrated into the offer in traditional medical centres in the coverage of some health insurers and even in some national health systems.
- This discipline is being used for the treatment of many diseases through the use of mineral waters and which are classified into five categories (bicarbonates, sulfates, sulfur, chlorinated and weakly mineralized oligometalic). Each type of water is optimal for a different type of treatment. Some of the treated pathologies are

- related to rheumatology, physiotherapy, breathing treatments or dermatological treatments.
- Encompassed in different establishments within these services offer a very wide range:
 - Medicinal waters. Those that are usable for therapeutic purposes and that have been declared Public Utility. Its beneficial health properties depend on the molecular structure of water, of mineral substances dissolved or suspended in and the temperature and pressure that rises to the surface.
 - Water features determine the type of ailment that can be treated and each spa bases its offer depending on the type of water that has: bicarbonates, calcium, chloride, ferruginous ...
 - Therapeutic treatments. They offer a set of techniques used to cure or alleviate a disease or pre-emptively to prevent the emergence and re-emerging diseases and conditions. Spanish spas have a large group of professionals to offer therapeutic indications necessary depending on the composition of the water in order to alleviate circulatory, digestive, nervous ailments...
 - Thermal techniques. In the resorts are performed therapeutic procedures used in therapies with medicinal mineral waters: aerosols, aromatherapy, irrigations, others.
 - Complementary techniques. It carried out a series of additional therapeutic procedures applied in the facilities of the SPA in conjunction with traditional techniques: slimming cures, lymphatic drainage, electrotherapy...

Spain has an important spas network and enjoys significant recognition among customers. At present (updated 2012 data Hydrotherapy Observatory), in Spain there are 113 spas in operation distributed in the following regions.

The National Spa Association (ANBAL) is an association formed for over 100 years and represents a total of 60 resorts throughout Spain. Each of these centres have a fundamental feature that have medicinal mineral waters declared of public utility and therapeutic treatments directed by medical specialists are held in these centres have all the relevant health registration.

The main function of ANBAL is the promotion and defence of interests of the sector through the definition of strategies and valid promotion plans for all centres, depending on the needs that are identified between the network associated spas. You could say that the spas have been the drivers of health

tourism as it were seen as a place in which to spend a few days off in a tourist accommodation and maintenance included and that also could treat an ailment or prevent a rest time and attention are obtained.

Depending on the type of water that is offered in each of the spas can offer the patient a different treatment. Among the therapeutic treatments offered in the network of ANBAL we can find:

- Circulatory.
- Dermatological.
- Digestive Diseases.
- Nervous or relaxing.
- Renal.
- Respiratory.
- Rheumatic

The Healthy Hotels

According to SpaFinder Wellness or, healthy hotels are one of the trends for the coming years in the world of wellness. Gyms, swimming pools and spas are common in many hotels, but international chains and boutique hotels reinforce the offer by adding adaptations to the consumer, such as running routes, exercises in the gym, sleep programs and vegan and gluten-free menus services.

1.4. Health Tourism in Spain

In Spain, there are new health tourism facilitators. For example, Medical Stay Group offers medical tourism destinations in Madrid, Barcelona and Costa del Sol. It offers assistance to medical centres, private transfers, personal shopper, tour operators, hotel reservations, interpreters, health consulting and legal assistance. Information about medical centres offering stakeholders nor other complementary services is not provided (such as hotels or residences can hire). It also includes insurance that covers both the patient and passenger and covering any unforeseen arises during the journey (accidents or medical complications). Medical care Spain, meanwhile focuses on the medical destination of Alicante. A total of 12 hospitals for trauma treatments, plastic surgery, ophthalmology and assisted reproduction are promoted. According to its own website, it has agreements with travel agencies, hotels and spas to provide a complementary service to its customers.

The services offered focus on the following areas:

- Identification of clients or patients interested in medical treatments performed in Spain and take advantage of the stay for tourism based on the potential they have. This search business is done for different centres with those agreements and thus provide "clients" centres.
- Advice to medical centres for internationalization and that in the not too distant future may attend the needs of foreign patients. In this sense, they function as a consulting company.
- Facilitator medical care needs that may arise for an international patient. In this area, the company is able to provide customer support in the following areas:
 - Gateway information or medical home doctor destination to destination the doctor can analyse the patient's medical history and give its approval to the treatment prior to arrival at destination.
 - Permanent contact between the patient and the hospital where you are, serving as translators.
 - Management of leisure time available to the patient during stay: car rental, hotels, tour guides, restaurants, etc.

1.4.1. Health tourism demand in Spain

The traditional demand for tourism in these areas has generated enough critical mass for there to be a specialized, in many cases, for the foreign patient. Such is the case of the islands and the Costa del Sol.

Here is a list of the characteristic of the most areas that attract tourist:

- Barcelona. Barcelona Medical Center and BIMA¹⁰

- The potential for international tourism in Barcelona, along with one
 of the most complete and advanced offerings in public health in
 Spain, makes this city and its area of influence one of the most
 attractive health tourism sites.
- The tradition comes to it from the great prestige of many of its professionals (Puigvert, Gil Vernet, Barraquer, Dexeus or other and resulted in more than 25 years ago, the first Spanish platform of health tourism, Barcelona Medical Centre (BCM) to strengthen the recruitment and support of government and business community.
- This same philosophy led a group of professionals led by Antonio de Lacy, surgeon Hospital Clínic expert in minimally invasive surgery, to improve Barcelona International Medical Academy (BIMA), a platform that brings together twenty renowned doctors in public and private schools, open to anyone proving some

international exposure. The idea is enhanced as care concerning but also in teaching and research.

Barcelona Medical Centre

- It is a platform or association formed by a public-private entity (among them is the Catalan Tourist Board and Tourism Barcelona) that provides medical services in a total of 20 hospitals located in Barcelona and addresses a national and international market.
- The platform is Spain's oldest medical tourism, and includes 20 medical centers in Barcelona of international prestige: 8 general clinics, 8 monographs centers, 4 centers of diagnostic tests.
- In addition, medical services provided by hospitals, BCM offers other complementary services that facilitate the patient type treatment and stay are:
 - Closed treatment packages under the fixed price formula.
 - Pre-service remote consultation to evaluate the patient before it comes to facilities.
 - Tour guides.
 - Organization and planning trip from source.
 - Accommodation management and patient residence and companions. On this platform, a number of hotels to accommodate attendants and rest of the patient during the treatment are promoted.
 Specifically, these hotels are: Husa Hotels, Roc Blanc Hotels, ABaC Restaurant & Hotel, Le Meridien Ra, Guitart Monterrey Hotels, Hotel Colon Thalasso Thermal and Lugaris.
 - Patient care service and passenger.
 - Interpreter services.
 - Shuttle service for transfers between hospitalresidence-airport.
- In terms of quality, there is no indication that is the system of quality assurance that the platform established to accredit associated medical centres and provide information on these aspects to the customer.

- Madrid, Madrid Medical Centre¹⁰

 Madrid, for the same reasons as Barcelona is another favourite destinations for international tourists. Some of the prestigious health centres in Madrid are the Hospital of Coslada, Clinic Moncloa ASISA, the Alcala de Henares clinics and Hospital South Capio Group, Hospital Our Lady of America, Clínica Baviera and Hospitals San Jose and San Camilo's USP group.

- Alicante. Mediterranean Healthcare 10

- Alicante has an important private healthcare infrastructure based on its tradition as an international tourist destination. Specializing in Plastic Surgery (Medimar International Hospital) and oftalomología (especially international prestige by Dr. Jorge Alio, head of the Ophthalmological Vissum Corporation, headquartered in Alicante).
- To lesser extent, they also highlight cardiological specialties, bariatric and metabolic surgery, neurosurgery and oncology.
- The Mediterranean Health Care is a non-profit organization that brings together eight of the most prestigious private hospitals and health centres in the province of Alicante, Spain.
- It is managed directly, without intermediaries or commission charges, the whole process of booking and hiring specialized medical treatments. Said process comprising:
 - Prior information specialty treatments and network centers.
 - Assistance in reserve management and treatment.
 - Personal attention to patients during the pre- and postoperative.
 - Pick up from hotel or airport to downtown and back.
 - Rehabilitation, if necessary, and / or convalescence in Alicante.
 - As a curiosity, they offer a service of second medical opinion
- The inclusion of health centres to offer publishing is not to subject it to the possession of accreditation or quality certification. The criteria appear to be based on the quality of facilities (single use rooms with extra bed or sofa bed for the passenger) and availability of comprehensive medical charts.
- The platform leverages the large flow of tourists Alicante receives for decades, so that a long experience in the treatment and care to international patients is argued. Also highlights the high rate of population of foreign residents in the area, which has been generating care services in different languages, and other services tailored to foreigners.

- In relation to demand, in different interviews they claim that their main countries of origin are Russia, Algeria and UK. Specifically, in 2011 60.000 Russian tourists were received.
- As a selling emphasize quality, price and climate of the Costa Blanca.

Costa del Sol¹⁰

The Costa del Sol has all the elements to be one of the destinations more capacity in Spain. Climate, access through one of the airports in more capacity in Spain, as well as the AVE, which connects you to Madrid, as well as a complementary quality tourism (golf, sports, beach, etc). Furthermore, the quality and quantity of existing private hospitals (50 percent of the Andalusian private hospital capacity) provide it with ideal conditions for this health tourism will become a perfect strategy to help break with seasonal tourism.

- Canary and Balearic Islands¹⁰

- As in the case of Costa del Sol and Alicante, it's a traditional (especially European, German and English) destinations for foreigners, which has led to a wide offer of private health that has already focused on these segments. Many patient centres are in several languages, reception services, agreements with travel agencies to address urgent patient on vacation, and other complementary services.
- O Hospiten group. Originally from the Canary Islands. It is a private hospital network of internationals, with more than 1,000 beds, committed to providing health care services. Since 2000, under the strategic plan of the company, Hospiten started an international expansion through localization of important tourist centres in Europe and America where feasible opening of a health centre of very high quality. It has fourteen hospitals located in Spain, Dominican Republic, Mexico and Jamaica. It maintains partnerships with a wide range of hotels, tour operators, cruise companies and other stakeholders in the tourism sector.
- Another hospital or interest group for health tourism is the care network Juaneda present in Balearic and Canary Islands with four hospitals, nine polyclinics and 26 medical centres. In fact, in the Balearic Islands accounts for a third of the private health activity

- and turnover. They have a structure designed to cater to foreign patients, interpreters and customer service team helps with the language barriers. They have agreements with 85% of tour operators operating in the Balearic Islands.
- In the Canary Islands, Gran Canaria Wellness platform has integrated medical centres in its offer and has created a second brand: Gran Canaria Medical, in order to support the promotion and marketing of this industry.
- In Baleares, following the Integral Plan of Tourism of the Balearic Islands where health tourism is established as one of the key products to generate tourism, in February 2013 took place the I Forum of Tourism and Health of the Balearic Islands, organized by the Ministry of Tourism and sports in collaboration with the Union of Health Enterprises Balearic Islands, the Balearic Hidrospas Association and the Association of Dietitians and nutritionists Baleares. It is a meeting point between the managers of tourist destinations, health professionals and welfare and tourism industry to exchange knowledge, experience and reflections on the importance of health tourism as a strategic hub for promotion of our destination, the prospects for supply and demand, or the creation of new and attractive offers associated with the pursuit of physical and mental welfare to position our destination among our main European markets.

- Extremadura¹⁰

- Proximity Tourism
 - Badajoz because of its proximity to the Portuguese border, has always received a significant amount of Portuguese in search of quality health care. It is particularly evident in specialties like ophthalmology, maxillofacial and assisted reproduction.
 - It is tourism that does not usually generate overnight stays, so the average spending per tourist is lower than in other areas (although health services are more expensive than complementary services)
 - Badajoz Medical Center is a platform for medical tourism created in 2009 to, among other things, support the promotion and marketing of health tourism in Extremadura. Currently it integrates three of the organizations with greater demand for health tourism in Extremadura: Clinical Sanchez Trancón-Tecnoláser, Extremadura Institute for

- Assisted Reproduction (REIA), and International Centre for Oral and Maxillofacial Surgery (CICOM).
- The Extremadura centres have adapted their offer to the Lusitanian demand. All their websites have translated the Portuguese language and provide patient care in Portuguese. Tecnoláser, the percentage of Portuguese customers exceeds that of Spanish, has made numerous marketing initiatives in Portugal: Portuguese has agreements with insurance companies, several centres in Portugal, and has conducted several campaigns to promote their services.

The phenomenon of repatriation

A phenomenon to be considered is that of repatriation. It has been observed that in recent years, a significant volume of Extremadura who had migrated to areas of stronger economies (Madrid, Barcelona), returning once retired to Extremadura. These returnees require numerous services related to dependence, which has led to an important home care services offer. Although it is not a tourist international health as such, the offer can be used to focus it created abroad in the future.

1.4.2. Health care and tourism in Spain.

The Spanish health care system is considered as one of the best in the world. The World Health Organization (WHO) puts it in 7th place health in the world. Newsweek puts in 3rd place, behind only Japan and Switzerland. According to the World Tourism Organization (OMT), Spain is the 4th country in tourist arrivals in the world. Some data related to international tourism in Spain reflect the importance of this industry for the whole of the Spanish economy:

- In 2011 Spain was the destination for 99.9 million international visitors, 57% of whom were tourists. Total spending generated by this number of visitors climbed the 58.851 millions of euros.
- In this period of 2011, a total of 56.7 million international tourists, a figure that was 7.6% higher than that achieved in the previous year it was received.
- Regarding the average daily expenditure of international tourists, this ratio rose 5% over the previous year as there was a decrease in the average stay (below 4%).
- The summer season a year concentrated most of arrivals, over 37% of the total, and was also the period where tourism spending concentrated.

- Among the source markets, it highlights the UK, Germany and France, bringing together 55% of tourist arrivals in Spain.

Source: page 21 from "turismo de Salud en España"10

1.5. Health Tourism in the Canary Islands

The Canary Islands are a Spanish archipelago situated of the coats of the southern coast of morocco. The main islands (from largest to smallest) are Tenerife, Fuerteventura, Gran Canaria, Lanzarote, La Palma, La Gomera and El Hierro. There are also a few small islands and islets that are La Graciosa, Alegranza, Isla de Lobos, Montaña Clara, Roque del Oeste and Roque del Este. The archipelago has a large amount of natural attraction, such as Teide National Park in Tenerife and Maspalomas in Gran Canaria.

Nowadays, this group of Islands belongs to Spain. But before it was colonised, the Canarias were inhabited by prehistoric animals. And were visited by the Phoenicians, the Greeks and the Carthaginians. According to these, the islands were uninhabited but there was evidence of ruins of great buildings.

This archipelago has been of great interest to many countries because of it location, a key link between continent. And also because of its climate, which is considered as ideal against illnesses.

Even though the Greeks considered the Canary Islands as a Health resort, not many civilization took advantage of his exceptional climate because of its location, the main reason people travelled to these islands was to stop off and then continue the journey between Asia, America and Europe.

Some of the few visitors of these islands were famous travellers, some of these accompanied by doctors, on their way to different continents.

Following the recommendations of many doctors and the invention of the steam engine and its application in maritime transport, increasing transoceanic navigation, and peace in the sea after the end of the Napoleonic Wars (1815) allowed Canary Islands incorporated as a port of call on the routes and our docks frequented by the first steamships, thousands of tourists were already visiting the islands to cure or relieve rheumatic, skin and, above all, respiratory diseases. The Canary Islands had become an exceptional destination for revitalization, for the renewal of body and mind through all types of treatments using therapeutic qualities from the natural elements.

And an escape to warmer climate regions, warm waters, nature and fresh air, will now mark economic elite behaviour. In the late nineteenth century resting by the sea it was considered best for certain diseases convalescence thermal

stations. Canaries, for its geographical situation, offered the climate, sea and nature to help restore the health of the Sick. Consequently, a migratory wave of wealthy Britons occurred during winter time to seek refuge from the cold in places with more pleasant climates such as the Canary Islands. For this reason, the bulk of tourists moved to the islands, especially Tenerife and Gran Canaria, in the early years of tourism, in the last quarter of the nineteenth century, it was for convalescence of certain diseases. Most likely other tourists were fleeing the sweltering rigors of Victorian society. Many will stayed on the islands for life.

This allowed British doctors concerned with climate therapy approaching the Canary archipelago to the weather conditions for analyse its islands. Desperately seeking the best climate, regardless of the state of housing, because most of the foreign doctors who travelled were sick themselves. The trip to a tourist place with possible interest medical (health resort) suited him for two reasons; firstly, to his own convalescence, traveling to the islands to try to heal themselves. Second, because discovering the properties of a place to cure lung diseases such as tuberculosis, would give them prestige in the medical and scientific institutions, and used their knowledge for their patient's therapy. Treatment of tuberculosis by climate played an important role up to the twentieth century.

Thanks to the growing demand, the first "health" hotels or sanatoriums sprang up in the islands. They were high quality establishments which laid the foundations for the tourist development of later years and which preceded some of the best resorts and hotels in Europe, now found in the Canary Islands. The first one was the Sanatorium in the Valle de la Orotava, opened on the 12th September 1886. The Hotel Taoro, in Puerto de la Cruz, and the Hotel Santa Catalina in Las Palmas de Gran Canaria soon followed suit.

Nowadays travellers from all over the world still visit the Canary Islands to renew body and mind. The mild temperatures, the number of daylight hours, the pure sea air, the waters, together with all the natural resources make the archipelago a paradise of well-being.

1.6. Top health tourism in the world

The following countries are considered the top ten health tourism destination according to TheRichest¹⁷

 Thailand. A lot of health tourist travel to Thailand seeking the best health care services, such as cosmetic surgery and rehabilitation treatment services. The services it offers are considered the best and cheapest rehabs in the world.

- **2. Mexico.** Offers cheaper medical treatments, such as dental care and weight loss surgery.
- **3. United States.** Even though It is considered as one of the most expensive countries to seek health care, thousands of medical tourist travel to the U.S to treat the most complicated health conditions looking for the medical facilities and professionals.
- **4. Singapore.** Offers one of most sophisticated cancer diagnosis and treatment services, and offers other good medical facilities in the world. It also invest a lot in health care, the latest and significant investment being a \$300 biotechnology research centre.
- 5. India. India is an emerging country in the health tourism market. It attracts patients from the surrounding countries that offer less developed health care. And because of the lower cost of health care, Canadians and Americans
- 6. Malaysia. Attracts more than half a million medical tourist each year and is ranked as one of the most health care friendly spots for those seeking medical care abroad. Many Americans and British are attracted to Malaysia because of its large English speaking population and strong infrastructure.
- **7. Brazil.** A lot of tourist are attracted to the offer cheap treatment and variation of very qualified plastic surgeons.
- **8. Turkey.** Turkey offer a few cheap medical treatments such as eye surgery. Another reason that turkey is home of many western trained doctors.
- **9. Taiwan.** Taiwan has a world class medical services and facilities. This country has invested a lot to offer the best health care services in the world. And the cost of health care is 50& lower than countries such as the United States.
- **10.Costa Rica.** A lot of international tourists visit this country every year tin taking advantage of the cheap health services, this amount to 15% of all international tourist that visit Costa Rica.

It is important that in the past health tourism has been present in the Canary Islands since the times of the Greeks and the Romans. But was lost for many

years and the archipelago was forgotten. It wasn't until the 18th and 19th century when the Islands became a popular health tourism destination, but this popularity faded as other countries became of more interest. As a result. Spain are not included in the top end of health tourism, even though a lot of health tourist destinations are still largely visited.

2. Objectives

2.1. Main objectives

The main objective of this project is to determine if the Canary Islands are a major health tourism attraction in the XXIst century. And determine what the benefits from coming to the Canary Islands for the health tourist are.

2.2. Secondary Objectives

As of June this year, Great Britain decided to no longer be part of the European Union (EU). And since British tourist play a big part in health tourism, it will be interesting to see what effects them leaving the EU will have on European health tourism destinations like the Canary Islands.

3. Materials & Methods

In order to investigate different aspects related to the health tourism in the Canary Islands, a search using the keywords health tourism, Canary Islands, Doctors and Tenerife, medical travellers in PubMed, Google Scholar and Elsevier.

The main criteria for selecting the articles were their relationship health tourism and the Canary Islands, or including any of the keywords mentioned above. The inclusion and exclusion criteria were:

- Full text articles were included, articles that only were only available as abstracts were excluded.
- Books, articles, press releases and government funded documents were included
- All these had to be in English and/or Spanish.

The search led to the information that follows.

One of the book found spoke about the climate in the Canary Islands and about the beginnings of health tourism in the canaries, for example *Clima y medicina* ¹⁶ by Nicolas Gonzalez Lemus. González Lemus also wrote el Puerto de la Cruz, primer centro turistico en canarias about the first Sanatorium that was built in the Canary Islands. Another important step in bringing health tourism to the islands.

Also, another the books found was that of Pliny the Elder called *Natural History*¹⁰, where he described the islands. This is the first reference of the Canary Islands and proof that the ancient civilizations visited these islands.

The following findings are famous doctors, naturalist, politicians who visited the islands and wrote about the benefits of the warm weather, or conducted a study on the islands during the 18th and 19th Century:

Lady Brassey

An English traveller and writer aboard the luxury yacht named *Sunbeam*. Lady Brassey was married to Sir Thomas Brassey, who later became Earl Brassey. They visited Tenerife in the 19th century, and lady Brassey wrote about Tenerife in her book called "*The Voyage in the Sunbeam, our Home on the Ocean for Eleven Month*"².

Dr. William andreson

Physician and naturalist aboard the *Resolution*, accompanying James Cook. Anderson directly pointed out the therapeutic properties of the insular climate. He suffered from tuberculosis and died aboard the *Resolution* the August 3, 1778 as a result of it. During his visit to Tenerife wrote: "the air and climate are remarkably healthy and in particular provided appropriate relief to diseases such as tuberculosis." William Anderson advised doctors send their patients to Tenerife because of the uniformity of temperature and mild climate, instead of recommending the European continent or Madeira³

Dr. John White

One of the captains of the First Fleet, squadron, under the captain Arthur Phillip, left for Botany Bay on May 13, 1787 with the first group of men (700 convicts). White also exposed the qualities of the climate of Tenerife for convalescence of the sick or invalids. White stressed about the unique benefits due to the good weather, commented: "The weather in Tenerife is nice and healthy. None better for convalescence of the sick. To this we must add, that those who want to live here can choose the temperature you like most by the mountainous character of the island" 16.

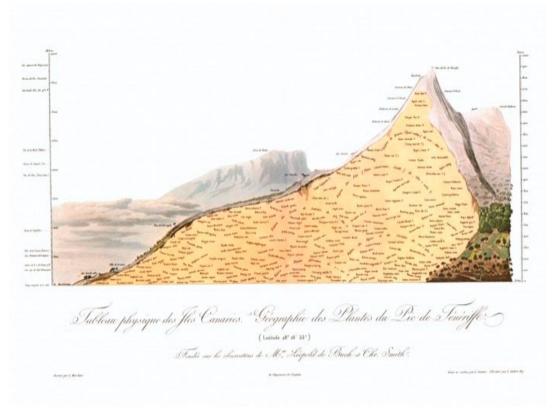
Dr. George Staunton and John Barrow

Companion of George Macartney on his trip to Beijing in 1792 to take over the embassy of her Majesty in china. Staunton compares the Canary Islands, Tenerife in particular, with Madeira, the health resort of the moment, declaring himself in favour of the Canary Islands. Such enthusiasm shown was very important, because in those decades of the late eighteenth century Madeira, near the French and Italian banks, was a prominent tourist destination centre among the English⁴.

Also a companion of George Macartney with George Staunton. Barrow registered thermal records and said that the climate of the Canary Islands was perhaps the most delicious in the world because during his stay in the Canaries, the records proved that the Fahrenheit thermometer never went under 70° (21°C) and reached 76° (24°C). Barrow wasn't the only person to register the temperatures in Tenerife, also, the British residents on the islands showed a lot of interest in the climatology phenomenon among other reason was because they had the measuring instruments⁴.

Alexander Von Humboldt

Humboldt was a Prussian geographer, naturalist and explorer. Visited the Canary Islands for a brief amount of time in 1799. Humboldt represented the geography of the vegetation in Mount Teide in a picture published in the atlas of the journey "Tableau Physique des Iles Canaries. Geographie des Plantes du Pic de Tenerife"⁵.



Source: Lámina LIV "Vue de l'intérieur du Cratère du Pic de Ténériffe", Humboldt, Alexander von (1810): Vues des Cordillères, et monumens des peuples indigènes de l'Amérique. Paris: Schoell⁵.

Christian Leopold Von Buch and Christen Smith

Von Buch was a geologist from a Prussia and Smith was a Norwegian doctor. Both shared an interest in botany and travelled to the Canary Islands in 1815. There Dr Smith planned to do a botanical study that he never released himself because he died a year after leaving the Islands⁷.

Jean-Baptiste Bory de Saint-Vincent

The influence of climate on the origin of lush vegetation and natural wealth of the Canary Islands was a very common appreciation among travellers. In 1801 the French naturalist Jean-Baptiste Bory de Saint-Vincent did not hesitate to affirm that the smoothness of the prevailing temperature in the valley of La Orotava favoured the fertility of the soil⁴.

Sir William Robert Wills Wilde

Was an Irish surgeon, father to the famous Oscar Wilde. Came to the Canary Islands in 1837 in search for a miraculous cure for tuberculosis. Wrote the "Narrative Voyage to Madeira, Tenerife, and along the shores of the Mediterranean, including a visit to Algiers, Egypt, Palestine, Cyprus, and Greece, etc"¹⁶.

Wills Wilde, with William Cooper and James Clark (Clark never visited Tenerife, but observed from a distance), were the first to observe the Canary Islands and its climate. Thanks to these scientist, the canaries were regarded as first as a health resort then as a marvellous and interesting holiday destination.

Gabriel Belcastel

Belcastel was a French conservative politician who came to the Canary Islands so that his daughter could recover from a bronchial illness in 1859. Even though he wasn't a doctor, he made a compilation of all the investigations that have been made about the beneficious climate of Tenerife. He later published the compilation called "Les Iles Canaries et la Vallee d'Orotava au point du vue hygienique et medical" ¹⁶.

Another finding was the Spanish Government plan called "*Turismo 2020. Plan de turismo español horizonte 2020*" published in 2007. Where it determines the Governments plan to boost all tourism areas, including health tourism by 2020.

And another releae by the Spanish Government is "*Turismo de Salud en España*"¹⁰, published in 2013. In it describes Spain's current situation regarding the health Tourism Market.

4. Results & Discussions

The Canary Islands have been considered as a health tourism location since the early ages but were forgotten for hundreds of years. It was only after they were colonised and there prime location between the continents did they attract multiple travellers, maybe some of them not for health reasons, but they used the Canaries as a stopping point in their journey towards America and Asia.

Unfortunately, with the fall of the Roman and Greek empires, the Canaries remained forgotten for hundreds of years until 15th century. In this century, the Spanish empire colonised the Canary Islands.

After many years of remaining forgotten by all other countries and empires, in the 18th century multiple travellers visited the islands, mainly because of its key location acting as a way point in between the continents. Some of these travellers were famous captains, scientists and doctors, as mention before. These were the first pioneers in spreading the excellence of the Canary climate were succeeded by doctors from all over Europe who, when travelling abroad became popular, began to recommend the Canary Islands for therapy based on bathing in sea water and life in the open air with the benefits provided by the sea breeze. However, these praise found little echo among the islanders owners. The visitors did left in amazement and wondered how come there are islands with a climate as outstanding and much higher than those in Europe and even in winter Madeira.

One of the reasons the Canaries could improve as a health resort was the help of these prestigious doctors and scientist spreading the word of the healing qualities of the climate on the islands in some pulmonary diseases. Also the invention of the steam engine helped health tourist travel in a faster manner to the islands. But the Canary Islands lacked a minimum hosting service. Even considering that communications improvements were dynamic element of travel, the first causes of this lack of interest would be historical, cultural and even economic culture generated by the cochineal production, and precisely it was only with the economic crisis caused by the dramatic collapse of its trade was when the islands decided that tourism in general was an economic resource for economic improvement.

So in 1885, the retired English official, William Strickland Harris arrived and established the necessity of a first class hotel, that there was need for a sanatorium that would satisfy the demand for centres of rest on the coast, recommended by the medical literacy of the 19th century. In 1886, Harris started a campaign that had the objective of building a hotel with all the commodities

and modern advancements. And later that year, the Grand Orotava Hotel or Sanatorium of Puerto de La Cruz¹⁴ opens its doors (this is later called Martiánez hotel), the hotel was founded to receive tourist and sick foreigners, mainly British, with pulmonary diseases. All the services that are offered revolves around these sick tourists. And this is how Puerto de la Cruz is considered the first tourist centre in the Canaries and one of the most important of the world.

With the success of the Sanatorium of Puerto de la Cruz, other hotels spring up, like Hotel Buenavista, Rosa Gramperra House, Tomas Fidel Cologan House, and Luis Marina Lavaggi House.

So in the late 19th century, the first Sanatorium was built in Puerto de la Cruz to house the foreigners seeking health care, then two more hotels catering for health tourist were built. And after overbooking of these hotels, many projects were approved to create more sanatoriums and hotels on the coasts of Tenerife and Gran Canaria.

All this has contributed to the increase in acclaim towards the Canarias as a Health tourism destination in the 19th century.

The Spanish government has set out strategies and plans to improve health tourism in Spain, including in the Canary Islands as even though the islands attract tourist every year for holiday reasons and health reasons, unfortunately, there isn't evidence that the Canary Islands are one of the main tourist destinations in the world

4.1. Pros and cons of health tourism

As most industries, there are positive and negative effects. As is the case in health tourism

4.1.1 The Pros

- Constant exchange of treatment and revenue between them, the political links between those nations are affected in a positive manner. Stronger bonds between those nations are forged when the host nation and provide the foreign tourists with several amenities besides conducive medical treatment¹³
- Better trained health care personnel to cater for the needs of the future
- Health tourist¹³.

4.1.2. The Cons

- With patients travelling between countries, there is always a risk of bacterial and viral transportation with these patients¹³.
- The need to build more medical facilities, roads, hotels and accommodations, etc. This results in the destruction of the greenery and natural habitat to accommodate these new buildings. This can have a secondary effect of polluting the air, solid-toxic medical waste, noise and visual pollution, etc¹³.
- A shortage of natural local resources in some cases, especially in areas where there is already scarce local resources and the misuse of water in hotels by the tourist¹³.

4.2. Health tourism impact on health care professionals

One thing the health care tourist looks for is a good health care professional to entrust their wellbeing. They seek specialists who cater to their needs. Another aspect they look into is the health centre establishment, if it has accreditations from authorized bodies and if it's international standards meet international patient requirements¹².

As a country that prospers in medical tourism, more employment opportunities arise and fewer trained professionals from the country leave seeking better employments and financial opportunities¹². Medical professionals are content as they get the required job satisfaction and financial fulfilment even when stationed in their native country.

4.3. Brexit and its effects on medical tourism

As of the 23rd of June of this year, the British voted to leave the EU, the first country to leave the EU. Many questions have arisen regarding health care, medical tourism, economy and trade of how they will be affected by the Brexit vote.

Many believe that maybe the British will find it difficult to receive treatment abroad, and some others believe that there won't be many changes because of a possible retaliation from the United Kingdom (UK), as many EU citizens live in the UK⁹.

It is also unlikely that British citizens travelling to Spain or any other EU country will be made to apply for a visa, as the British tourism to other EU countries is a valuable market. In any case, the British will lose the right to free medical treatment in case of an emergency, and therefore will have to get private health insurance beforehand.*So far, the slide of sterling to the lowest it has been for years is a short term reaction to the Brexit vote, but has a few consequences for the British, some of these are less money to spend on their holiday, higher cost of their holiday and higher flight prices⁸.

All this being said, at this moment in time there is mostly speculation about might happen, but nothing is certain. In the coming month things will unfold.

5. Conclusions

There is evidence that in the Canary Islands there have been numerous occasions where health tourism has been held in great esteem in the archipelago. Thanks to its location and the visits from renowned foreigners, especially famous doctors, naturalist and politicians. But because of diverse reasons, the Canaries took a long time in generating a proper base were health tourism is welcomed, not rejected, and were the people seeking medical treatment or health services can receive it.

Even though nowadays the Canaries are considered as a health tourism destination, they are not one of the top destinations and compete against the likes of Thailand, Singapore, Costa Rica and even the United States. Therefore, more should be done to improve the amount of tourism that come to the Spanish isles for this reason, many of the tourist come only for a holiday and to disconnect from the daily routine.

Another aspect worth commenting on is the recent referendum taken place in the UK where the British people voted to leave the EU leaving a lot of uncertainty in the coming years as to how exactly it will effect health tourism to EU countries.

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