

Methods of dealing with therapeutic hospital centers

Case study of Safaga City for the treatment of psoriasis

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ABSTRACT:

The research is concerned with studying the elements of environmental healing in the world and the planning methods and design foundations for those sites and how to study sites with different and distinct environmental factors to deal with them and the mechanism of designing an environmental hospital therapeutic resort taking advantage of all the environmental elements of the distinguished sites. The research was concerned with studying the elements of environmental healing in Egypt and the classification of Egypt globally from where the quality of environmental hospitalization and the study of the different types and patterns of medical tourism resorts in Egypt and a focus on hospitalization from immune diseases such as psoriasis in the city of Safaga. The research aims to reach the design bases for designing medical tourism areas with the possibility of applying them to the study of the Egyptian case in Safaga and making it a global therapeutic hospitalization center by analyzing the factors and causes of hospitalization in Safaga and studying the elements of tourism in the city beside hospitalization, which may help in attracting tourists in addition to presenting global experiences And in similar Egypt, analyzing it and getting out of it with the most important design foundations that can be applied to the case study area to achieve the highest level of exploitation of all the natural, design, environmental, economic, cultural and other elements in those sites.

Keywords: *Ecotourism - medical tourism - environmental components - psoriasis.*

I . Introduction

The city of Safaga is located within the map of global medical tourism for the treatment of chronic skin diseases. Tourists come from different countries of the world to the place to enjoy and treat diseases due to its highly saline water, closed bay, high mountains that take the shape of a horseshoe and islands in very salty water and black sand, and the privacy of the place, which qualifies the place for treating psoriasis and rheumatoid patients and qualifies Safaga to be the largest and most important environmental hospital center in the world.

The main objective:

- Learn about the importance of the role of urban design in hospital areas and the treatment of immune diseases such as psoriasis.
- Access to the most important basic elements of medical tourism globally and the most important elements of the Egyptian case.

Sub-goals:

- * Determining the planning and design elements for the selection of environmental hospitalization sites
- * Understand the role of site coordination elements to assist in environmental recovery
- * Know the different types of spaces that must be available in hospital places
- * Maximizing the use of natural resources available in the city of Safaga and its tourism potential
- * Identifying the types of activities that are settled in the hospital spaces

II . The entrance to medical tourism

Medical tourism is one of the important entrances, which has attracted wide attention from decision-makers and officials and has attracted many members of society [1]

A. Definition of Medical Tourism:

A definition of medical tourism, since man knew that some diseases such as rheumatic and chest diseases are cured by moving to certain places characterized by a special climate, then discovered the therapeutic properties of mineral springs, and the tourist in these cases is either sick or convalescent, or in perfect health, and all he wants is comfort His nerves are exhausted, his body is tired and his stay is relatively long in the place of treatment, and the length of stay usually ranges between 2-4 weeks, so the average spending of this type of tourists is 10 times more than the average spending of the average tourist. [1]

B. The importance of medical tourism:

Medical tourism is a very important economic pillar because of its impact on the health sector and economic and social development in general. It also affects investment and achieves an increase in consumption. It is also an economic source to contribute to national income by increasing foreign exchange revenues and alleviating the unemployment problem. Where the World Tourism Organization expects that the spending of tourists in the year 2022 will be more than 2000 billion dollars, which is a large amount of Opening up on television, the Internet, and social media, The change in tastes in human interests, where attention to appearance has become an added value [1]

C. The main elements for choosing sites. Elements (design and layout): [5]

- Connectivity to the main road network
- Communication with international and domestic airports.
- Availability of an environmentally friendly infrastructure network.
- As close as possible to the hospital resource.
- Stay away from the sources of pollution in the urban environment and study the surrounding uses.
- Achieving thermal comfort and taking into account the wind direction in the distribution of uses.
- Take into account the functional elements between the elements.
- Provide clear entrances between visitors.
- Provide subentries and emergencies for project elements.
- The use of environmental architecture in the design of the resort facilities and the use of environmentally friendly materials
- Taking into account the proportion of
- Optimum utilization of visually distinct areas
- Availability of sufficient parking spaces.

D. Elements of medical tourism:

Successful experiences in the leading countries in this sector indicate the importance of the following elements in developing [4]

<p>A unique location and easy access: Proximity to airports Ease of communication for the site</p>
<p>Provides advanced and good quality medical and treatment services: - Availability of medical staff - Availability of the latest medical devices</p>
<p>Provides distinguished tourism services by designing programs for patients to suit their special needs to visit hospitals and medical and treatment centers, in addition to some paragraphs - Appropriate prices: health tourism and hospitalization programs allow beneficiaries to obtain medical and hospital services at lower prices. - Quality and Diversity: Tour operators are keen to agree with medical and hospital facilities that have quality certificates - Availability of the latest medical technology in medical centers - Don't wait for an appointment - Accompanying recreational programs such as visiting tourist attractions in the area where the medical facilities are located.</p>
<p>Provides means of communication, transportation, and infrastructure qualified to provide distinguished tourism services.</p>
<p>Provides the appropriate legal framework to protect patients and medical treatment centers in an internationally approved manner. - Patients' rights protection laws - Laws to supervise treatment centers</p>
<p>Provides advanced financial and insurance systems appropriate to the requirements of patients of all types and financial capabilities. - Availability of insurances for medical treatment - Availability of sufficient and varied housing places to take into account the financial capabilities of the residents</p>
<p>- Provides a favorable cultural climate. - Receiving care in a facility that does not have facilities for communication such as interpreters</p>
<p>Political stability and provide security, and the availability of a national database for medical tourism information</p>

Table 1: shows the element of environmental healing globally [4]

E. Recommendations of some international studies in medical tourism

- It was recommended after studies in the United States of America, Germany, and Britain that the percentage of preference for alternative medicine among patients reached 60% of those seeking treatment.
- Egypt falls within the MTI index, which is an indicator for measuring the extent of progress and care in medical tourism in countries, and Egypt ranks number 26 [3]



1. Canada	76.47		25. Colombia	64.95	
2. Singapore	76.43		26. Egypt	64.81	
3. Japan	74.23		27. Malta	64.75	
4. Spain	72.93		28. Brazil	64.35	
5. United Kingdom	71.92		29. Poland	64.10	
6. Dubai	71.85		30. Turkey	63.91	
7. Costa Rica	71.73		31. Morocco	63.80	
8. Israel	70.78		32. Bahrain	63.65	
9. Abu Dhabi	70.26		33. China	63.47	
10. India	69.80		34. Greece	63.45	
11. France	69.61		35. Saudi Arabia	63.32	
12. Germany	69.29		36. Jordan	63.26	
13. Oman	69.03		37. Panama	62.77	
14. South Korea	68.81		38. Tunisia	61.78	
15. Czech Republic	68.32		39. Qatar	61.13	
16. Taiwan	67.93		40. Jamaica	60.74	
17. Thailand	66.83		41. Russia	60.17	
18. Italy	66.75		42. Mexico	59.47	
19. Dominican Republic	66.32		43. Lebanon	57.14	
20. Argentina	66.26		44. Guatemala	55.04	
21. Portugal	65.96		45. Kuwait	54.84	
22. South Africa	65.82		46. Iran	44.38	
23. Hungary	65.69				
24. Philippines	64.99				



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Table 2: Shows the ranking of countries in terms of the MTI. [3]

F. The components of medical tourism in the Middle East and the annual economic return [5]:

treatment source	type of treatment	Jordan 3 billion	Tunisia 1.2 billion	Lebanon 1.9 billion	Egypt 1.7 billion	Morocco 1.3 billion
Dead sea	Saltwater treatment	exists				
sea coast			exists		exists	
Sulfur and mineral eyes	Sulfur water treatment		exists		exists	exists
			exists		exists	exists
black sand	Burial in the sand				exists	exists
hot sand					exists	exists
industrial resources	cosmetic treatment			exists		

Table 3: The leading countries in medical tourism in the Middle East [5]

III. Studies of global experiences

- Many countries of the world have been able to reserve an important place for them on the medical tourism map due to the natural and material characteristics they possess, which have made them one of the main poles of treatment around the world. [4]
- The tourism sector as a whole has witnessed continuous growth since World War II. A report by the World Tourism Organization of the United Nations indicated that the number of international tourists reached one billion in 2012, compared to 25 million. [4]
- In 1958, 277 million in 1980 and 528 million in 1995, it is expected to continue to increase by 43 million annually to reach 1.8 billion arrivals by 2030. [4]
- It is difficult to derive statistics or the size of the medical and health tourism market because the real number may be hidden for other purposes, some travelers who are classified based on leisure and entertainment may be for treatment, especially since some do not openly disclose that they came for a medical procedure

A. Holiday Inn Resort in Jordan:

Definition of the site and its features [4]:

- The holiday inn center is located on the Dead Sea, which is very salty

- Jordan is considered the first destination for treatment in the Middle East and North Africa, according to World Bank studies, and many factors have contributed to this, most notably its natural characteristics and the important infrastructure that it possesses.

Dead Sea: This area is considered a warm and sunny area throughout the year, with an average temperature of -30.4 degrees, and the sun's rays in the Dead Sea area are harmless to humans. The Dead Sea is famous for its black mud that is very rich in salts and minerals. [4]

- The salinity of the Dead Sea water helps in curing many diseases such as multiple skin diseases. The presence of calcium, magnesium, and bromine among the salts of the Dead Sea makes the unique combination of salts and minerals in those waters, one of the important sources of natural healing, which is supervised in the resorts available by a group of specialized people.

Holiday inn resort [4]

- The basis for choosing the resort experience is based on the highly saline Dead Sea area and the availability of sand baths that treat immune skin diseases such as psoriasis.



Fig (1): shows Holiday inns layout

B . Conclusion:

Elements of medical tourism	Availability	Ingredients added from the results of the international case study
A unique location and easy access: -Proximity to airports -Ease of communication with the main roads	available	There is a helicopter airstrip near the site.
Ease of communication for all uses within the site	available	
It provides advanced and good quality medical and treatment services: -Availability of medical staff. -Availability of the latest medical devices. -Availability of distinguished tourism services by designing programs for patients to suit their special needs to visit hospitals and medical and treatment centers, in addition to some paragraphs. - Appropriate prices: In health tourism and hospitalization programs, they allow beneficiaries to obtain hospital medical services at lower prices.	available	
Quality Tour Operators Care Agreement with medical and hospital facilities that have quality certificates.	available	
Availability of the latest medical technology in medical centers.	available	Relying on environmental components, sand baths, mud baths, and solariums.
Not waiting for an appointment.	unavailable	
Accompanying recreational programs such as visiting tourist attractions in the area where the medical facilities are located.	available	
The presence of many nature reserves near the site	available	
Provides means of communication, transportation, and infrastructure qualified to provide distinguished tourism services.		
Provides the appropriate legal framework to protect patients and medical treatment centers in an internationally approved manner.	unavailable	
Patients' rights protection laws	available	
Laws to supervise treatment centers	available	

Elements of medical tourism	available/ unavailable	Ingredients added from the results of the international case study
Provides advanced financial and insurance systems appropriate to the requirements of patients of all types and financial capabilities. Availability of insurances for medical treatment.	available	
- Providing various places of residence to take into account the financial ability of the residents.	unavailable	
Provides a favorable cultural climate.	available	Urban formation endorses the environment and cultural heritage.
Taking into account cultural heritage when constructing buildings.	available	
Receiving care in a facility that does not have communication facilities such as interpreters and others increases misunderstandings about care.	available	
Political stability, security, and the availability of a national base for medical tourism information	unavailable	
Considering the environmental aspect.	Available	-Taking into account the contour formation of the land and using it in a design taking into account the waterfront of the residence units
	Available	-Taking into account the psychological state of patients and distributing recreational spaces near the areas of residence and near the areas of sand baths.
		-Ease of communication for all design elements - Distribution of sand and sunbaths and areas of algae treatment units near the accommodation units

Table 4: Explains the comparison, analysis and results of studying the elements in Holiday Inn Resort

IV. Case study Safaga City - Egypt:

A. Description of the site:

Safaga is an Egyptian city belonging to the Red Sea Governorate. [6] , It contains many tourist villages specialized in diving training and in holding international competitions for water sports because of its weather and black sand useful in treating incurable skin diseases such as rheumatoid and severe water salinity that treats psoriasis [6]

Introduction map of the study area

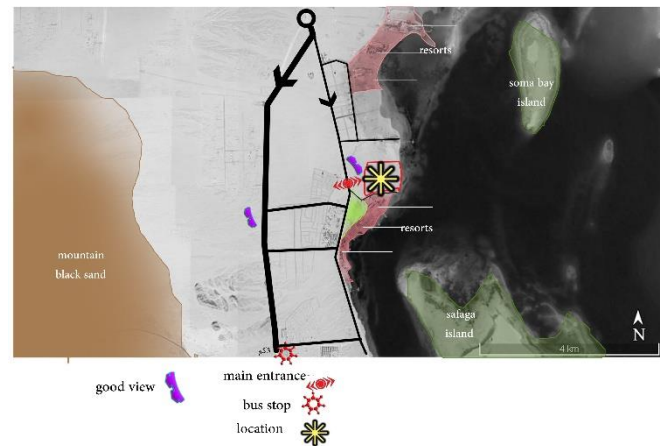


Fig 2: safaga city map

B. Reasons for choosing the site:

1- Black sands:

- Sands containing 3 radioactive substances: uranium, thorium, and potassium, many salts and minerals have a therapeutic role, such as gold salts: to treat rheumatoid germanium salts: They are semiconductors of electricity that are activated by sunlight and penetrate the skin of a patient and calm the disturbed immune system and is present under the skin in psoriasis or joints as in rheumatoid disease [7]

2- *The distinctive weather and ultraviolet rays:*

- The warm sun rays in Safaga shine throughout the seasons and months of the year, and it is an important factor in treatment, as the Safaga area is surrounded by mountainous heights, which makes it a wall against wind and sand storms, and this provides a pure atmosphere of impurities and dust, which produces Its high concentration of UV rays is of great benefit in treatment [7]

3- *Closed Bay:*

- It is characterized by a high salinity of more than 55 parts per million as a result of the low water speed - in addition to the presence of many unique coral islands, which are a source of many salts and minerals that treat many diseases. [7]

- The presence of silt on the seabed is rich in gold salts, which resulted from the sedimentation of torrential waters descending from the mountains surrounding the Gulf, and it contains many important elements and minerals that are deposited in the sea silt. Therefore, it was placed on the body and then exposed to UVR, which causes the exchange of ions and calms the immune system. The sun's rays also help secrete vitamin D, which strengthens bones [7]

4- *Mountains that take the shape of a horseshoe:*

- They act as a barrier to wind, dust, and storms and help focus solar radiation - The presence of torrential waters rich in gold salts and important elements that mix with torrential water and are deposited in sea silt - Containing many minerals and salts that interact with seawater. [7]

V. An applied example in Safaga: The Author

A. *Application on the case study*

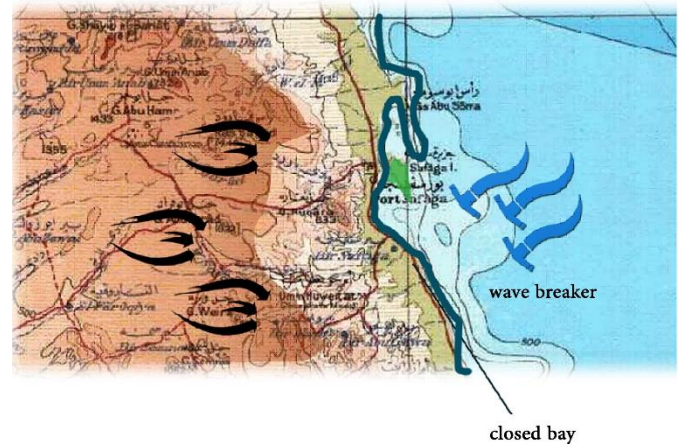


Fig 3: shows safaga bay



Fig 4: master plan

VI. Recommendations and conclusion:

Table 5: shows the most important elements of medical tourism in Egypt

Elements of medical tourism	Ingredients that have been added to the privacy of the situation in Egypt
A unique location and easy access: -Proximity to airports -Ease of communication with the main roads	<ul style="list-style-type: none"> - Diversity in Residence units (ATTACHED-SINGLE -DOUBLE) To take into account the diversity of categories for visitors - The possibility of placing therapeutic lakes in a site that helps in the shortness of the contour period and the diastole in the Safaga Bay area - Assisting in the establishment of diving centers to benefit from coral reefs in the treatment of diseases - Availability of housing places for specialists and workers in one place - Taking into account the availability of many healing gardens on the site, as psoriasis is an immune disease
Ease of communication for all uses within the site	
It provides advanced and good quality medical and treatment services: <ul style="list-style-type: none"> - Availability of medical staff. - Availability of the latest medical devices. - Availability of distinguished tourism services by designing programs for patients to suit their special needs to visit hospitals and medical and treatment centers, in addition to some paragraphs. - Appropriate prices: In health tourism and hospitalization programs, they allow beneficiaries to obtain hospital medical services at lower prices. 	
Quality Tour Operators Care Agreement with medical and hospital facilities that have quality certificates.	
Availability of the latest medical technology in medical centers.	
Not waiting for an appointment.	
Accompanying recreational programs such as visiting tourist attractions in the area where the medical facilities are located.	
The presence of many nature reserves near the site	
Provides means of communication, transportation, and infrastructure qualified to provide distinguished tourism services.	
Provides the appropriate legal framework to protect patients and medical treatment centers in an internationally approved manner.	
Patients' rights protection laws	
Laws to supervise treatment centers	

Elements of medical tourism	Ingredients added from the results of the international case study
Provides advanced financial and insurance systems appropriate to the requirements of patients of all types and financial capabilities. Availability of insurances for medical treatment.	
- Providing various places of residence to take into account the financial ability of the residents.	
Provides a favorable cultural climate.	
Taking into account cultural heritage when constructing buildings.	
Receiving care in a facility that does not have communication facilities such as interpreters and others increases misunderstandings about care.	
Political stability, security, and the availability of a national base for medical tourism information	
Considering the environmental aspect. <ul style="list-style-type: none"> - Taking into account the contour formation of the land and using it in a design taking into account the waterfront of the residence units 	
<ul style="list-style-type: none"> - Urban formation endorses the environment and cultural heritage. - Taking into account the psychological state of patients and distributing recreational spaces near the areas of residence and near the areas of sand baths. - Ease of communication for all design elements - Distribution of sand and sunbathing areas and treatment units' areas close to each other 	

ACKNOWLEDGMENT

The author acknowledges gratitude to the faculty of Urban and Regional Planning

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