

THE REALITY OF MEDICAL TOURISM: A FIELD STUDY OF SELECTED THERAPEUTIC TOURISM SITES IN IRAQ

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Abstract:

This research aims to assess the current state of therapeutic tourism in Iraq in order to identify key criteria that contribute to its development. The study is based on a field-based analytical approach, using a random sample of beneficiaries of therapeutic services. To collect primary data, a questionnaire was used, and the statistical program SPSS was employed to analyze the data and extract results.

The study reached several conclusions, the most important of which is that therapeutic sites in Iraq are generally well-received by visitors. However, the overall evaluation does not reflect a satisfactory level of service quality. Respondents indicated weaknesses in service provision, poor maintenance of facilities and infrastructure, and a lack of promotion and organization.

Among the studied sites, *Hammam Al-Alil* in Mosul was rated the most favorably, achieving the highest mean score and the lowest standard deviation—indicating relative satisfaction due to its ongoing development. In contrast, *Ain Kabrit* in Mosul received the lowest acceptance, pointing to a need for service improvement. Therefore, the General Authority for Tourism should reconsider the current state of these sites to enhance their therapeutic and tourism roles.

Keywords: Tourist Sites – Therapeutic Tourism

Introduction:

Therapeutic tourism is an ancient and evolving phenomenon that has accompanied humanity since early civilizations. It originated from the need to seek healing in specific locations believed to possess environmental or spiritual properties conducive to recovery—such as temples, springs, baths, rivers, and unique climatic zones.

This need laid the foundation for a form of health tourism that continues today, with evolving tools and organizational methods. The civilizations of Mesopotamia—especially the Sumerian, Babylonian, and Assyrian—developed advanced concepts of medicine, illness, and healing. Therapeutic tourism is considered a source of national income, and improving service quality can increase the number of beneficiaries and contribute to economic development. It also offers psychological comfort to visitors.

The research is divided into three sections:

1. **Research Methodology**
2. **Concepts of Therapeutic Tourism**
3. **Statistical Analysis of Primary Data** reflecting the reality of therapeutic tourism from the beneficiaries' perspective.

Section One: Research Methodology

1. Research Problem:

The quality of therapeutic tourism plays a central role in enhancing beneficiary satisfaction and loyalty. Despite its growing importance, there are signs of a gap between expectations and the

actual conditions of these sites, which may lead to decreased satisfaction and fewer repeat visits. Hence, an in-depth analytical study of beneficiaries' opinions on service quality is needed.

Main Research Question:

- What is the actual quality of therapeutic sites from the beneficiaries' perspective?
- **Research Importance:**

This study deepens the understanding of therapeutic tourism and its impact on the tourism sector, especially in Iraq—a country with ancient civilizations and unique therapeutic sites. The research adds value to academic literature and can help formulate strategies to revitalize this type of tourism by aligning it with the needs and desires of beneficiaries, thereby building a sustainable positive image.

3. Research Objectives:

- Identify the actual condition of therapeutic tourist sites.
- Assess the level of attention given by tourism institutions to these sites.
- Derive conclusions and recommendations for developing therapeutic tourism.

4. Research Hypotheses:

- The current condition of therapeutic tourist sites does not meet the needs and expectations of beneficiaries.
- Beneficiaries' opinions vary regarding the relative importance of therapeutic sites.

5. Data Collection Methods:

- **Theoretical Framework:** Based on contributions from researchers, including journals, theses, and books related to the topic.
- **Field Study:** A questionnaire was the primary tool for collecting data. It was designed for clarity and covered indicators measuring the reality of therapeutic tourism in Iraq. A three-point Likert scale was used (Agree, Somewhat Agree, Disagree) with weights (3–1) and a hypothetical mean of 2.

6. Research Population and Sample Description:

Defining the research population is a fundamental step. Since the questionnaire contains 9 items, a minimum of 10 times the number of items (i.e., 90 questionnaires) had to be distributed per site. To ensure accuracy, 110 questionnaires were distributed at each site. All 110 were retrieved and deemed valid for analysis, as shown in Table (1):

Table (1): Number of Distributed and Retrieved Questionnaires at Each Site Under Study

Name	Number of Questionnaires Required	Number of Questionnaires Distributed	Number of Questionnaires Retrieved	Number of Questionnaires Lost	Number of Questionnaires Damaged	Number of Questionnaires Distributed	Number of Questionnaires Retrieved
Al-Alil Site in Nineveh Governorate							
Kabrit Site in Nineveh Governorate							
Hajlan Site in Anbar Governorate							
Sawa Site in Anbar Governorate							
Al-Tamur Site							

Karbala Governorate						
Aqid Site in Karbala Governorate						
1						

As for the description of the research sample, the tables below (2-5) show that:

Table (2) Distribution of the Individuals Surveyed by Sex

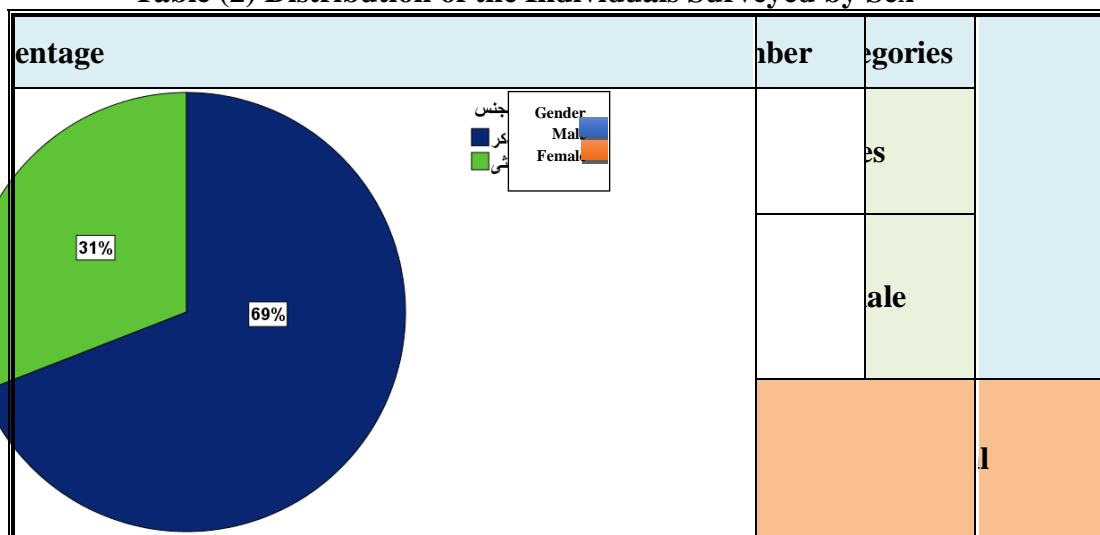


Table (3) Distribution of the Individuals Surveyed by Age

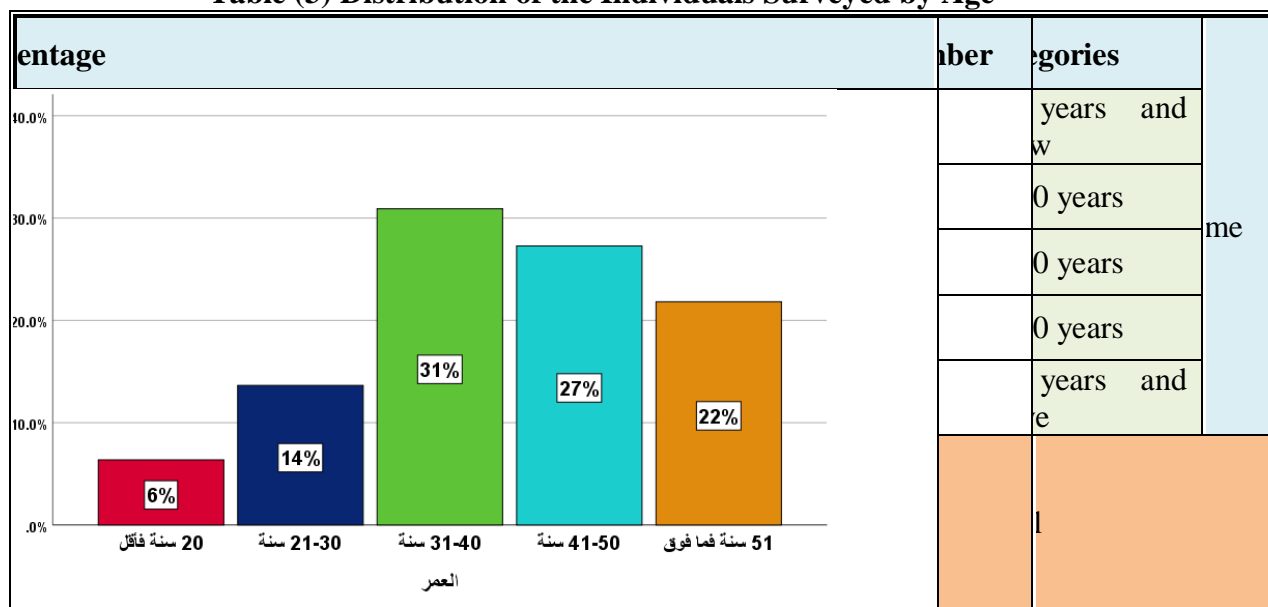


Table (4) Distribution of the Individuals Surveyed by Educational Level

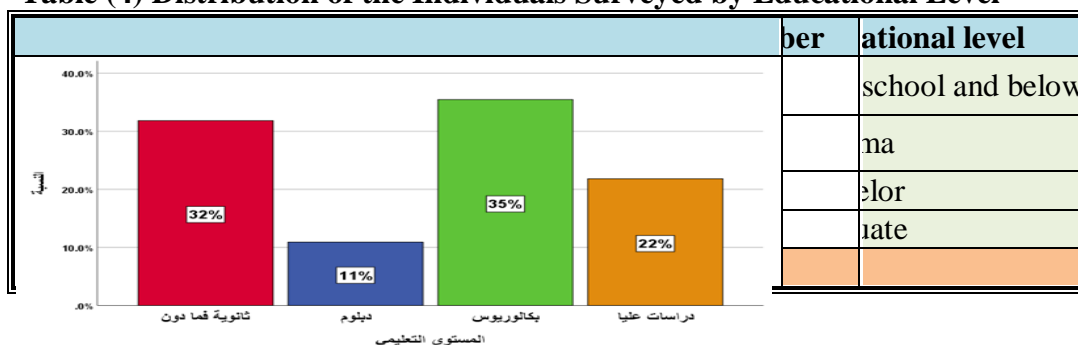
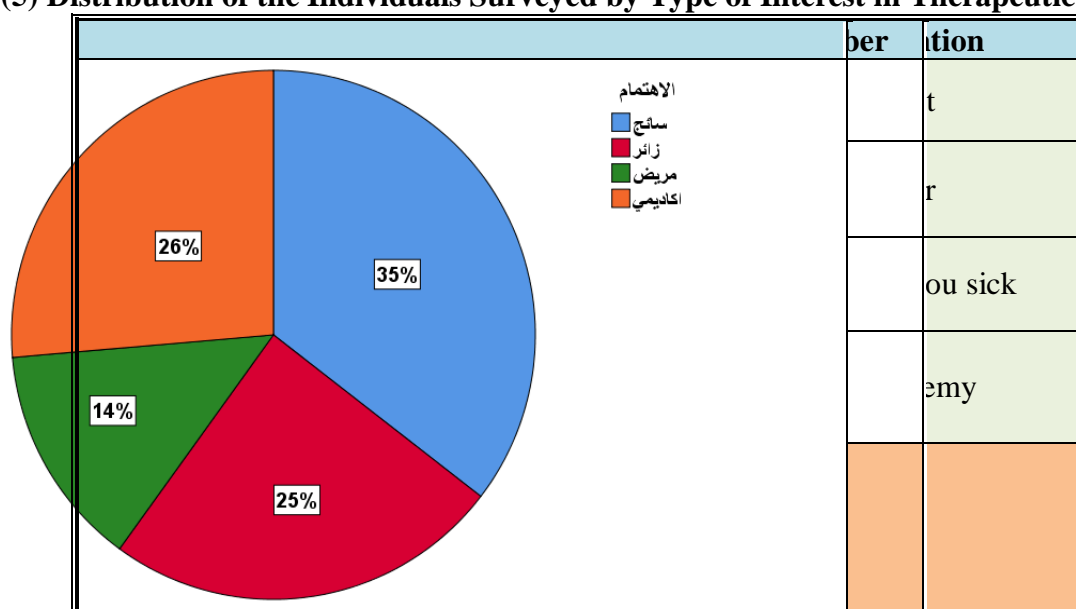


Table (5) Distribution of the Individuals Surveyed by Type of Interest in Therapeutic Places



Second Topic: Medical Tourism

First: The Concept of Medical Tourism

Medical tourism is not limited to patients suffering from a specific disease, but includes multiple categories who want to recover their vitality, physical and mental fitness, and in order to clarify what medical tourism is, it is necessary to review some relevant definitions as follows:

Medical tourism has been defined by the United Nations World Organization (UNWTO) ⁽¹⁾ as the use of preparations and all therapeutic health facilities and services that can facilitate the use of natural resources such as mineral water, climate and sand for treatment and health. ⁽²⁾

Al-Tamar also believes that medical tourism is a modern term that has been invented in recent times that carries with it many meanings of hospitalization and treatment, research that has become one of the pillars of the economy and the financial return of many countries in the world, and what is meant by medical tourism is traveling outside the country of residence to countries where there are clinics and hospitals to receive the treatment and medical care that the individual needs for recovery, as well as adding a tourist schedule in which physical and psychological treatment is mixed:

Second: The Emergence of Medical Tourism

Since God created the earth and all that is on it, man has been in constant movement between traveling and moving from one place to another in search of his security and stability, and seeking his livelihood and health, tourism is as old as history:

Four thousand years ago, without the Sumerian history in Mesopotamia, the greatest eternal journey to this day is the journey of the Sumerian king Gilgamesh, the journey of searching for immortality and survival that began from Sumer to the land of eternity, Dilmun, the island where there is no disease, death or sorrow, as mentioned in the epic of Gilgamesh⁽⁶⁾, and this journey was in search of the herb of life.⁽⁷⁾ In the lines of the epic, the tenth tablet of the ancient Babylonian text is mentioned as follows:

"Where are you going, Gilgamesh? (And where do your feet seek you)? The life you are looking for will not be found."

In Mesopotamia, this type of medical tourism was known, where people were sent to the temples to receive treatment, and this treatment was linked to their religious beliefs, where the prevailing belief in the eyes of the people was that the disease was caused by a sin committed by man and angered the gods, and the proof of this is that the law of the Hammurabi and the political treaties that were concluded between the kings, as well as the boundary stones (kudru)⁽⁹⁾ require the gods to inflict all forms of diseases and punishments on those who destroy or distort these documents⁽¹⁰⁾.

At first, the means of treatment were simple and limited, depending on what the priests did in terms of paper amulets, and over time these means of treatment began to develop until the profession of medicine arose among them, and that the medical system in Mesopotamia, despite its connection to religion, is very similar to the system

Both rely on anatomy and pathology, which prescribe a medical prescription for the patient and determine the appropriate medicine for him, so natural herbs and spring eyes were used in the treatment⁽¹¹⁾.

Third: The importance of medical tourism

Tourism has recently become one of the most important industries in the world, its growth rates have exceeded the growth of industry and agriculture, as the First United Nations Conference on Trade and Development in Geneva in 1964 considered tourism among the invisible exports that can effectively contribute to the economic development of countries, and tourism is considered an important factor in the growth of international trade.⁽¹²⁾

Tourism has become part of all activities of life today, there is recreational tourism through which the tourist entertains himself for the sake of comfort and entertainment, and religious tourism, which is travel in order to visit religious and sacred places, as well as sports tourism for those interested in sports, whether participants or spectators in various sports games, and historical tourism, which is the tourist's desire to visit ancient historical places, as well as the love of learning about ancient civilizations and archaeological tourism, the purpose of which is to pay public attention to archaeology and conservation. on historical sites, which are part of cultural tourism⁽¹³⁾.

There are other types of tourism, but what interests us is medical tourism, which is related to our topic, as medical tourism has become an important economic pillar because of its impact on the health sector and economic and social development, where medical tourism is distinguished from other types of tourism, as it is considered a destination for tourists or those who intend to spend their leisure time for recreation in climate clinics and mineral water clinics

Medical tourism is also considered an economic source that contributes to the national income by increasing revenues, introducing hard currency to the country, and alleviating the severity of unemployment, because the tourist who comes for treatment is different from the

ordinary tourist, this tourist may take a long time for treatment, whether it is natural therapy or chemotherapy with modern devices.

Fourth: Characteristics of Medical Tourism

Medical tourism is characterized by a set of characteristics:

- 1- Medical tourism is affected by the conditions of the country, whether internal or external, such as political turmoil, wars, security, and control imposed on tourists, in addition to natural and climatic changes such as floods, hurricanes, earthquakes, and volcanoes.
- 2- Medical tourism is characterized by seasonality, as its consumption is in limited periods, in leisure time, and according to climate changes.
- 3- Medical tourism is non-storable tourism, meaning that the tourist is forced to move from one region to another or one country to another in order to obtain its consumption.
- 4- The presence of the tourist is required during medical tourism, where both production and consumption are in the same place and at the same time.
- 5- The difficulty of attracting medical tourists annually due to the many tourist attractions and the abundance of competition⁽¹⁶⁾
- 6- The tourism product⁽¹⁷⁾ sold is mainly based on intangible riches such as beautiful nature, pleasant climate, historical and archaeological sites, and it has great potential to achieve unlimited financial returns if it is well planned and marketed in it⁽¹⁸⁾.

Fifth: Some of the Medical Tourism Sites Research in Iraq

Iraq is one of the countries rich in natural resources that can be used to support various economic and service sectors, including medical tourism, which represents a form of specialized tourism with rapid growth at the global level. The importance of medical tourism stems from the fact that it combines healing and recreation, taking advantage of natural features such as mineral springs, hot springs, and sulfur waters, which are spread in several Iraqi governorates, from north to south. These sites are distinguished by their ability to contribute to the treatment of many skin diseases and rheumatism, as well as its role in alleviating psychological tensions⁽¹⁹⁾. Despite Iraq's promising medical tourism potential, this sector still suffers from weaknesses in strategic planning, and deficiencies in infrastructure and support services. This requires an integrated development vision aimed at activating these potentials and employing them in an investment framework that enhances Iraq's position as a destination for medical tourism in the region⁽²⁰⁾.

Some of the medical tourism places in Iraq are as follows:

1- Hammam Al-Alil

Nineveh Governorate (21) is famous for medical tourism through the availability of springs and sulfur mineral water

⁽²²⁾ It was mentioned by Yaqut al-Hamawi in his book Dictionary of Countries under the name of Hammam Ali in the term of the people of Mosul, and researchers explain that the name of Hammam Ali is the predominant name for it in Mosul, where this name came from a person named Ali, who was the first to build the eye, so it became famous by his name, and that travel to Hammam al-Alil has been since ancient times by two routes, the first of which is by river by cruisers (which are medium-sized boats that can accommodate for five people), or by means of ferries (small camels with small umbrellas on their backs for the passengers, and the second was to travel by land, on horseback or on the back of donkeys, while the sick were carried to the bath of Al-Alil by means of the Takhtarwan (in Persian, takht-e-Rawan, i.e., a traveling bed in the form of a large hodge, carried by two horses, one of which walks in front of the other⁽²³⁾ about 26 km from the city of Mosul⁽²⁴⁾ and the road reaches Hammam al-Alil, where there are springs of metal springs⁽²⁵⁾. It is famous that people come to cure skin diseases on the banks of the Tigris River, that the area of Hammam Al-Alil was famous for this hot sulfurous water, so much so that its name is associated with its famous baths⁽²⁶⁾.

2- Ain Kubrit

Ain Kubrit is located on the right side of the city of Mosul under the Republican Hospital at present, overlooking the Tigris River, near the fortress of Bashtabiya⁽²⁷⁾ under the wall of the old city of Mosul⁽²⁸⁾, and Yaqut al-Hamwi mentioned it as being located under the Upper Monastery (Bashtabiya) on a mountain overlooking the Tigris River⁽²⁹⁾, and it is a sanatorium that is proverbial in the delicacy of the air, and its water is sulphurous that relieves scabies⁽³⁰⁾ and itching, and it is also useful in the treatment of chronic diseases and arthritis. It dates back to the year (301 AH 913 AD)⁽³¹⁾ studies have shown that a sulfur spring is characterized by almost constant temperatures throughout the year, ranging between (24 – 25 °C), which indicates relative thermal stability in this water system, and chemical analyses have proven that the concentration of sulfur in the eye is very high, ranging between 975 and 1000 mg/L throughout the year, which indicates that this water source is rich in sulfates and is likely to be This is the result of geological interactions in the aquifers of the water⁽³²⁾ This spring represents a natural spring with cold sulfur water that is descended to it by steps engraved in the sloping wall, and the people of the city inherited its visit for recuperation and recreation. Skin diseases are black in color and turn light after being exposed to the sun, as for its shape, the water of Ain Kubrit meets from several large and small springs, the most famous of which are two for bathing, one for men and the other for women, and the distance between them is seven meters, and the men's basin ranges approximately with a cat of four meters and a depth of half a meter, and a fence of bricks was built around it in a circular shape, noting that the main source comes out from under the wall of the old city of Mosul, and Ain Kubrit is one of the therapeutic tourist resorts that people visit from All over the country for the purpose of treatment, as it is one of the natural, historical, tourist and economic heritage landmarks in the city because of its many benefits, not the city once it is taken care of by the local government, represented by the Nineveh Governorate⁽³³⁾.

3- Ain Aqid

This spring is located in the district of Akra of Duhok Governorate, 92 km away from Mosul, and it is one of the beautiful tourist areas⁽³⁴⁾ and in an area known as Bakkerman⁽³⁵⁾, this spring is located, and the spring has healing therapeutic water, on which a room constructed of solid stones with a length of (5 m), width (3 m) and a height of (3 m) has an entrance from the side overlooking the Khazir River⁽³⁶⁾ in the southwestern part of the Bakkerman region, in addition to To its arched window and the surface of the building is level, inside this building there is a warm water spring, which contains mineral compounds, including sulfur, which contribute to the treatment of many skin diseases, and near this spring there are natural plants that spread in the area such as the mint plant⁽³⁷⁾ which is used in natural remedies, the proximity of this eye to the caves and its surroundings with mountains and dense vegetation gave it a picturesque view that made it the face of tourists, as many of them are keen to Visiting it periodically for recreation, relaxation and treatment Ain Aqed is one of the most important tourist sites in Iraq, as it attracts thousands of tourists annually, and the date of the construction of this Aqed is not known exactly, according to the residents of the area, it was built in 956 AD and was included among the archaeological areas in the district of Aqra in 2019 according to the survey carried out by an Italian team specialized in antiquities with the Directorates of Aqra Antiquities⁽³⁸⁾.

4- Ain Tamr (Shatha)

It is located 91 km southwest of Karbala and 80 km from the center of Karbala city, the city of Karbala can become an important destination for medical tourism, in addition to its leading and distinguished center in the field of religious tourism as a result of the spread of many therapeutic mineral water springs, especially in the oasis of Ain Tamr, and that its ancient name is Shatha, that the tourist who visits Ain Tamr passes historical evidence during his trip, and these testimonies are the caves of Tar⁽³⁹⁾ and the fort of Al-Akhdar⁽⁴⁰⁾ in addition to Al-Razzaza Lake⁽⁴¹⁾, the oasis of

Ain Tamr is characterized by the beauty of nature⁽⁴²⁾, as it is one of the secrets of the Western Desert because of its tourist landscapes, as it is located in the middle of a forest of palms, pomegranate and olive trees, one of the most important therapeutic water springs found in Ain Tamr is (Al-Ain Al-Kabir, Ain Al-Hamra, and Ain Al-Seeb), and it has acquired its names from the local environment, the water of these springs contains calcium and sulfur elements in high percentages, and the water of these springs is non-toxic, but The concentration of salinity and some chemical compounds in a high percentagemakes them unfit for drinking, but can be used for therapeutic purposes (i.e., the use of the water of these eyes in external treatment)⁽⁴³⁾ It helps to treat eczema diseases, all cases of scabies, and rheumatic diseases, the temperature of the water of these eyes is opposite to the temperature of the climate, as their temperature in summer is 20 degrees Celsius. While their temperature rises in winter and is warm, which makes them a suitable element for tourist activity, and great neglect has led to the drying up of most of these springs⁽⁴⁴⁾.

5- Lake Sawah:

Located in the governorate of Muthanna, 23 km west of the city of Samawa, the lake is believed to be inspired by the English word (Sour) which refers to the taste of sour water that travelers and foreign tourists called it, then the name was developed by the locals into the word Sawa for its ease of pronunciation, and the lake is known as the Pearl of the South, and it is also known as the Strange Lake or the Strange Lake. Being about six meters higher than the neighboring lands, unlike the desert oases, which are all located in low areas compared to the neighboring lands⁽⁴⁵⁾, the water of Lake Sawa differs from the rest of the water resources in Al-Muthanna Governorate, as it is a closed natural lake that does not have a source of constant flow from and to it, and this is what made the water of the lake semi-stagnant and affected by the type of climate prevailing in it, in addition to the The type of rocks that make up its basin that also affect its physical and chemical properties such as the increase of salts and others, where the lake does not have any rivers to pour into or exit from it, but is supplied with groundwater through underground water springs located under the lake and which leach to it from the Euphrates River⁽⁴⁶⁾ through cracks and longings, indicates that the high levels of salts in the lake water are higher than the permissible limits compared to the World Health Indicators (WHO).) made its water unusable for human, animal and plant use⁽⁴⁷⁾ The lake is considered one of the unique lakes in the world as a result of its high salinity with local concentrations of up to (34000 mm/liter) and the difference in the color of its water between dark green near the banks and blue color in the depth of the lake, which makes it an important haven for hiking and spending time for recreation and physical therapy, as people are used to visiting it from outside and inside the country, and what distinguishes Lake Sawa is its ability to form salt walls that surround all its sides and form a barrier to conservation. On the water and creates forms that attract attention from the deposits of salts that resemble artistic sculptures in the shape of a cauliflower flower, and the lake is currently suffering from drought and neglect as a result of high temperatures and lack of rainfall, and on the other hand, the decrease in the water of the Euphrates River:

6- Hajlan's eyes:

About 250 km west of the Iraqi capital Baghdad in the depth of Anbar province, where many heritage, archeological and tourist sites and natural places, which have been a destination for tourists and visitors for decades, "Hajlan Springs" are located in the city of Haditha⁽⁴⁹⁾ west of Anbar at a distance of 140 km, and Hajlan springs have sulfurous water used in many skin diseases and rheumatism, and these springs flow into the Euphrates River. One of the most famous historical monuments near the eyes of Hajlan is (Hajlan Bridge) located on Wadi Hajlan, which is the only corridor that connects the two cities of Haqlaniya to the former Haditha, it was established in (1909 AD) dating back to the Ottoman period, and this bridge was exposed to massive floods coming from Wadi Hajlan and the collapse of parts of the bridge in 1995, then the Anbar

Antiquities and Heritage Inspectorate carried out maintenance works for it. Between two waters, the water of the Euphrates is located in its body, which extends in its body like arteries, and the water of the desert surrounding it, surrounded by the wall by the wrist in its eyes, wells, and valleys

Third Topic: Statistical Analysis of the Actual Reality of Medical Tourism Sites: This topic includes the description and diagnosis of the opinions of the researched sample about the actual reality of medical tourism sites in Iraq:

1- The location of Hammam Al-Alil in Nineveh Governorate

The data in Table (6) show that the average percentage of the individuals who answered (agreed) was (26.36%), while the percentage of the individuals who answered (disagree) to those paragraphs was (25.56%), the average percentage of individuals who answered (somewhat agreed) was (48.08%), and the value of the standard deviation was (0.67), and the arithmetic mean was (2.01), which is within the period ($2.33 \leq RII \leq 1.67$) In other words, the opinions of the researchers in general are oriented towards agreement to some extent about the paragraphs related to this site, and the average relative importance of the reality of the Hammam Al-Alil site reached (0.67), which is a high relative importance.

At the micro level, paragraph (Q1), which represents the area of the site suitable to be a tourist site, obtained the highest relative importance of (0.86) and the highest value of agreement in terms of the value of the arithmetic mean, which amounted to (2.58) with a standard deviation of (0.61), while paragraph (Q9), which represents the reception of visitors according to pre-prepared tables, achieved the lowest relative importance of (0.52) and the lowest value of the agreement in terms of the value of the arithmetic mean, which reached (1.55) with a standard deviation of (0.71).

Table (6) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Hammam Al-Alil Site in Nineveh Governorate

Item	Response Scale	Mean	d. Dev.	Relative Importance	n Rank					
	Agree (3)	Somewhat Agree (2)	Disagree (1)							
	Count	%	Count	%	Count	%				
Q1	71	64.55%	32	29.09%	7	6.36%	58	51	36	
Q2	29	26.36%	60	54.55%	21	19.09%	07	57	59	
Q3	30	27.27%	65	59.09%	15	13.64%	14	53	71	
Q4	22	20.00%	61	55.45%	27	24.55%	05	57	55	
Q5	19	17.27%	50	45.45%	41	37.27%	30	71	50	
Q6	26	23.64%	54	49.09%	30	27.27%	06	72	55	
Q7	33	30.00%	56	50.91%	21	19.09%	11	70	70	
Q8	17	15.45%	65	59.09%	28	25.45%	00	53	53	
Q9	14	12.73%	33	30.00%	63	57.27%	55	71	52	
Average	6.36%		8.08%		6.56%		01	57	57	

If you'd like this formatted for publication or visualized as a chart, I'd be happy to help with that too.

Source: Prepared by the researcher Based on the outcomes of the (SPSS V.26) n=110

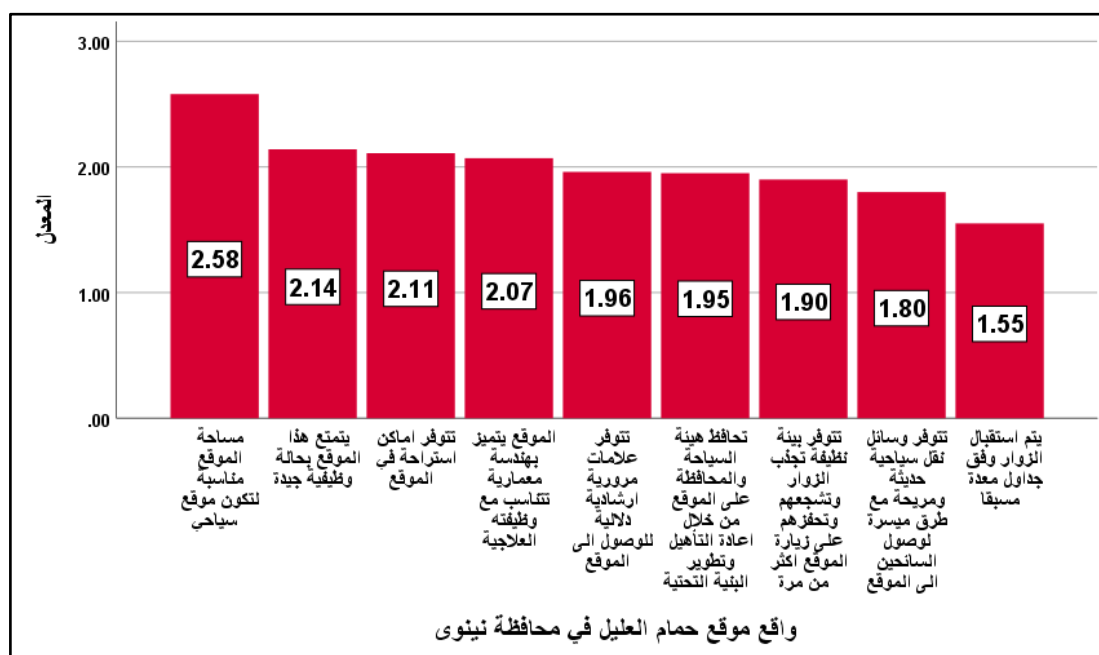


Figure () The order of the paragraphs of the location of Hammam Al-Alil in Nineveh Governorate

2- The location of Ain Kubrit is located in Nineveh Governorate.

The data of Table (7) show that the average percentage of the individuals who answered (agreed) was (15.55%), while the percentage of the individuals who answered (disagree) to those paragraphs was (49.90%), the average percentage of individuals who answered (somewhat agreed) was (34.55%), and the value of the standard deviation was (0.67), and the arithmetic mean was (1.66), which is located within the period ($1 \leq RII \leq 1.66$). In other words, the opinions of the researchers in general are directed to disagree on the paragraphs related to this site, and the average relative importance of the reality of the Ain Kubrit site reached (0.55), which is a moderate relative importance.

At the micro level, paragraph (Q1), which represents the area of the site suitable to be a tourist site, obtained the highest relative importance of (0.77) and the highest value of the agreement in terms of the value of the arithmetic mean, which reached (2.30) with a standard deviation of (0.74), while paragraph (Q4), which represents the preservation of the site by the Tourism and Preservation Authority through rehabilitation and infrastructure development, achieved the lowest relative importance of (0.47) and the lowest value of the agreement in terms of the value of the arithmetic mean, which amounted to (1.41) with a standard deviation of (0.63).

Table (7) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Ain Kubrit Site in Nineveh Governorate

الم	onse Scale	Mean	l. Dev.	tive Importance	Rank					
	gree (3)	ewhat Agree (2)	gree (1)							
	Count	%	ount	%	ount					
1	51	46.36%	41	37.27%	18	6%	0	1	7	
2	32	29.09%	53	48.18%	25	3%	5	2	0	
3	12	10.91%	47	42.73%	51	6%	5	7	5	
4	8	7.27%	29	26.36%	73	6%		3	7	

5	8	7.27%	30	27.27%	72	5%	2	3	7	
6	6	5.45%	42	38.18%	52	6%	9	0	0	
7	13	11.82%	32	29.09%	55	9%	3	0		
8	12	10.91%	32	29.09%	56	0%	0	0		
9	12	10.91%	36	32.73%	52	6%	5	0	2	
age	5.55%		5.55%		90%		5	7	5	

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)

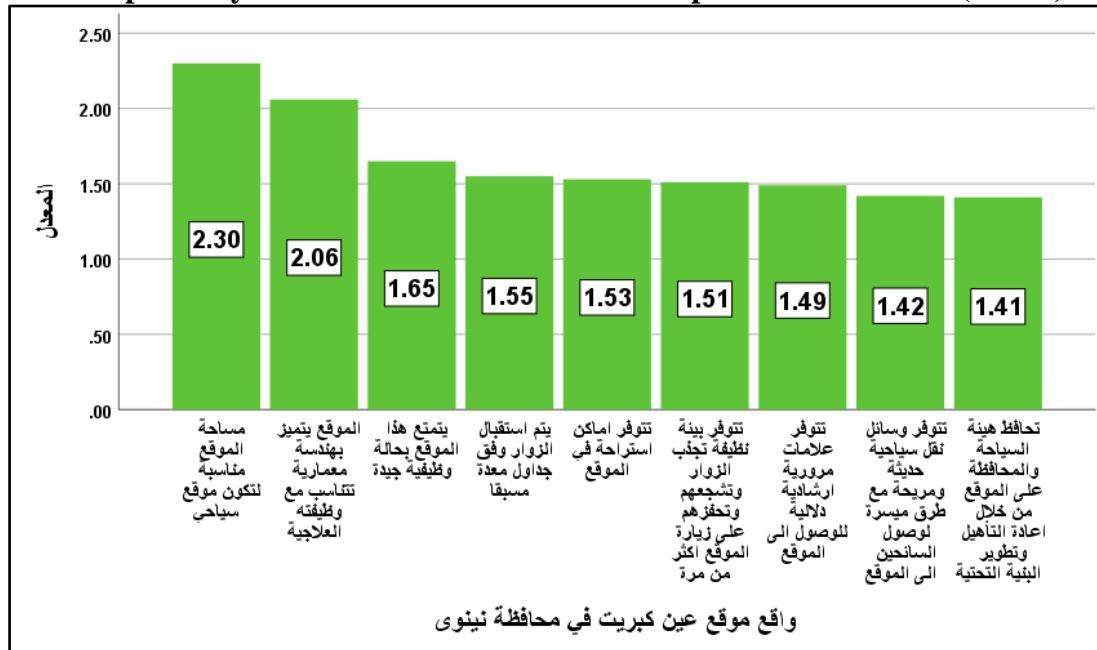


Figure () The order of the paragraphs related to the location of Ain Kubrit in the city of Mosul

3- The location of Oyouun Hajlan in Anbar province

The data of Table (8) show that the average percentage of the individuals who answered (agreed) was (16.26%), while the percentage of the individuals who answered (disagree) to those paragraphs was (34.75%), the average percentage of individuals who answered (somewhat agreed) was (48.99%), and the value of the standard deviation was (0.64), and the arithmetic mean was (1.82), which is within the period ($2.33 \leq RII \leq 1.67$) In other words, the opinions of the researchers in general are oriented towards agreement to some extent about the paragraphs related to this site, and the average relative importance of the reality of the Oyouun Hajlan site reached (0.61), which is a moderate relative importance.

At the micro level, paragraph (Q6), which represents the availability of indicative traffic signs to reach the site, obtained the highest relative importance of (0.78) and the highest value of agreement in terms of the value of the arithmetic mean, which reached (2.35) with a standard deviation of (0.74), while paragraph (Q4), which represents the preservation of the site by the Tourism and Preservation Authority through rehabilitation and infrastructure development, achieved the lowest relative importance of (0.48) and the lowest agreement value in terms of the mean value of the arithmetic which reached (1.44) and with a standard deviation of (0.60).

Table (8) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Oyoun Hajlan Site in Anbar Governorate

n	Response Scale	Mean	l. Dev.	Relative Importance (%)	Rank					
	Agree (3)	Somewhat Agree (2)	Disagree (1)							
	Count	%	Count	%	Count	%				
1	11	10.00%	55	50.00%	4	0%				
2	26	23.64%	68	61.82%	6	5%				
3	19	17.27%	59	53.64%	2	0%				
4	6	5.45%	36	32.73%	8	2%				
5	12	10.91%	46	41.82%	2	7%				
6	47	42.73%	55	50.00%	8	0%				
7	13	11.82%	54	49.09%	3	0%				
8	12	10.91%	53	48.18%	5	0%				
9	15	13.64%	59	53.64%	6	3%				
Age	16.26%		1.99%		75%					

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)

Figure () The order of the paragraphs for the location of Oyoun Hajlan in the city of Mosul
4- The location of Lake Sawa in Al-Muthanna Governorate

The data of Table (9) show that the average percentage of the individuals who answered (agree) was (12.73%), while the percentage of the individuals who answered (disagree) to those paragraphs was (42.32%), the average percentage of individuals who answered (somewhat agreed) was (44.95%), and the value of the standard deviation was (0.63), and the arithmetic mean was (1.70), which is located within the period ($2.33 \leq RII \leq 1.67$) In other words, the opinions of the researchers in general are oriented towards agreement to some extent about the paragraphs related to this site, and the average relative importance of the reality of the Sawa Lake site reached (0.57), which is a moderate relative importance.

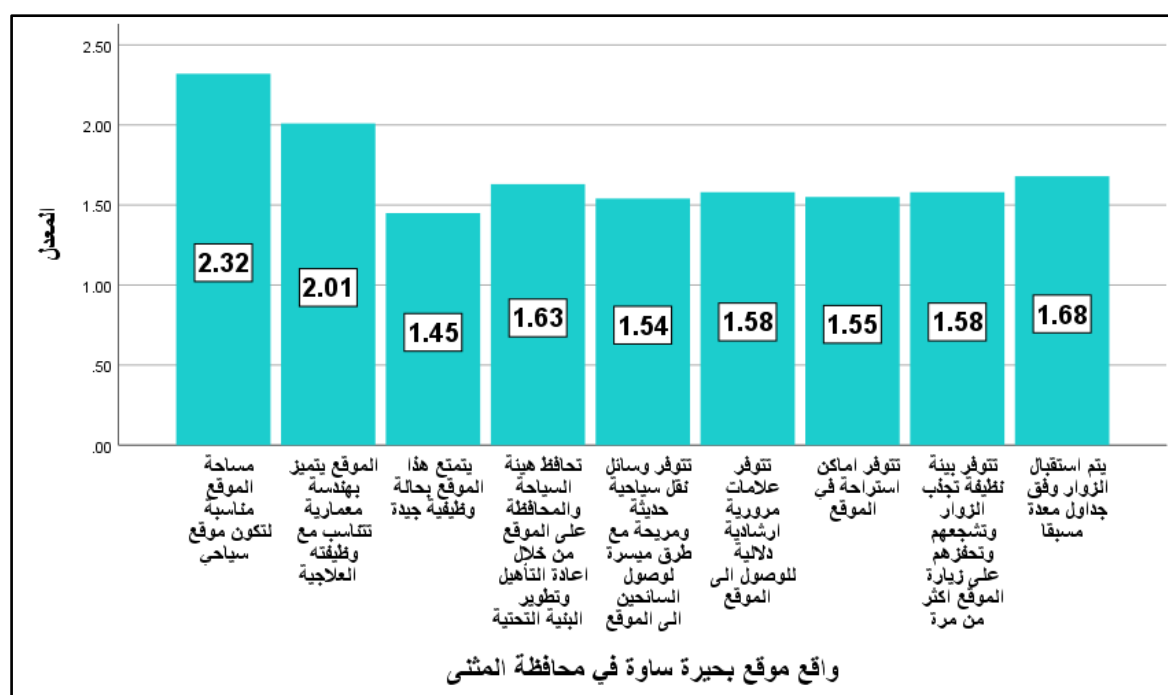
At the micro level, paragraph (Q1), which represents the area of the site suitable to be a tourist site, obtained the highest relative importance of (0.77) and the highest value of agreement in terms of the value of the arithmetic mean, which reached (2.32) with a standard deviation of (0.65), while paragraph (Q3), which represents the location of this site in good functional condition, achieved the lowest relative importance of (0.48) and the lowest value of the agreement in terms of the value of the arithmetic mean, which reached (1.45).) with a standard deviation of (0.60).

Table (9) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Location of Lake Sawa in Al-Muthanna Governorate

m	Response Scale	Mean	l. Dev.	Relative Importance (%)	Rank					
	Agree (3)	Somewhat Agree (2)	Disagree (1)							
	Count	%	Count	%	Count	%				
1	46	41.82%	53	48.18%	11	0%	2	5	7	
2	24	21.82%	63	57.27%	23	1%	1	6	7	
3	6	5.45%	38	34.55%	56	0%	5	0	8	

4	9	8.18%	51	46.36%	50	5%	3	3	4	
5	6	5.45%	47	42.73%	57	2%	4	0	1	
6	8	7.27%	48	43.64%	54	9%	8	3	3	
7	9	8.18%	42	38.18%	59	4%	5	4	2	
8	8	7.27%	48	43.64%	54	9%	8	3	3	
9	10	9.09%	55	50.00%	45	1%	8	3	6	
average	12.73%		1.95%		32%		0	3	7	

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)



2. Figure () The order of the paragraphs related to the location of Lake Sawa in Al-Muthanna Governorate

3. The location of Ain al-Tamr in Karbala Governorate

The data of Table (10) show that the average percentage of the individuals who answered (agreed) was (15.55%), while the percentage of the individuals who answered (disagree) to those paragraphs was (38.59%), the average percentage of individuals who answered (somewhat agreed) was (45.86%), and the value of the standard deviation was (0.65), and the arithmetic mean was (1.77), which is located within the period ($2.33 \leq RII \leq 1.67$) In other words, the opinions of the researchers in general are oriented towards agreement to some extent about the paragraphs related to this site, and the average relative importance of the reality of the Ain Al-Tamr site reached (0.59), which is a moderate relative importance.

At the micro level, paragraph (Q1), which represents the area of the site suitable to be a tourist site, obtained the highest relative importance of (0.78) and the highest value of agreement in terms of the value of the arithmetic mean, which reached (2.35) with a standard deviation of (0.68), while paragraph (Q2), which represents the site, is characterized by an architecture commensurate with its therapeutic function, achieved the lowest relative importance of (0.48) and the lowest value of agreement in terms of the value of the arithmetic mean, which reached (1.45).) with a standard deviation of (0.60).

Table (10) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Ain Al-Tamr Site in Karbala Governorate

r graphs	ive rtance %	lard Deviation	metic mean	onse Meter						graphs
				n't agree		ree to some nt		e		
					per		per		per	
				2		2		6		
				0		5				
				5		4		2		
				9		8		3		
				1		8		1		
				4		6		0		
				5		5		1		
				5		5		0		
				8		0		2		
				9		6		5		

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)

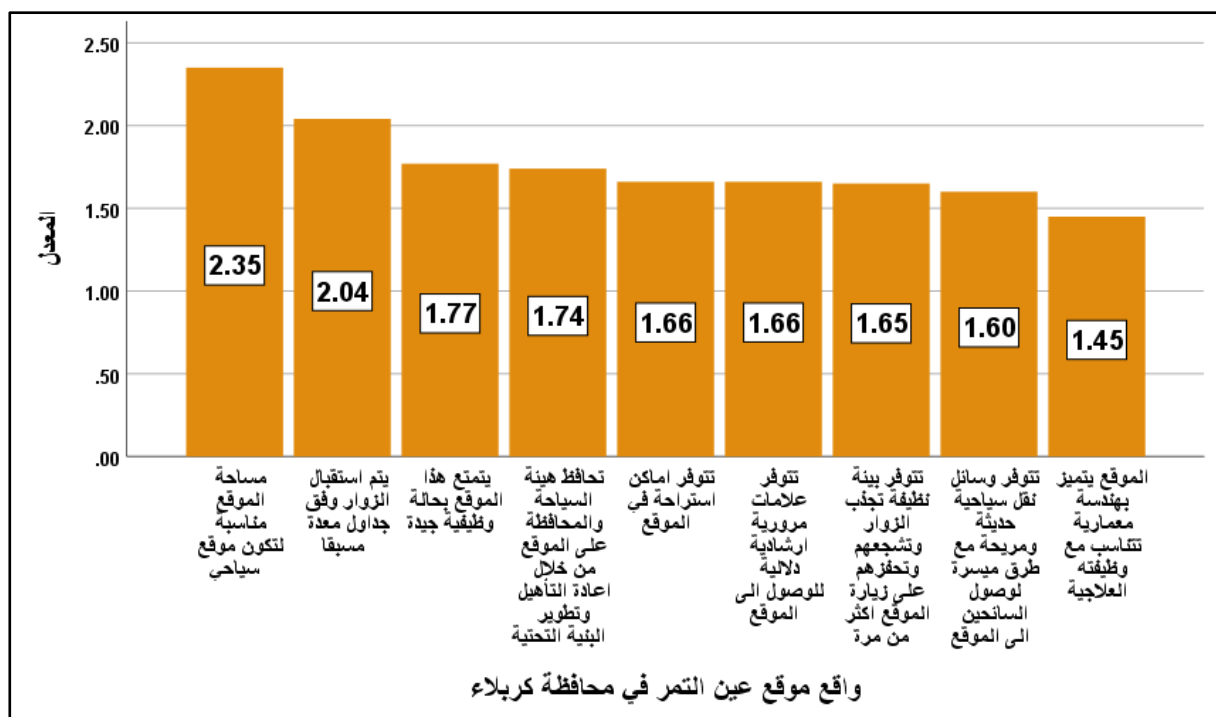


Figure () The order of the paragraphs related to the location of Ain al-Tamr in Karbala Governorate

5- The location of Ain Aged in the district of Akra in Duhok Governorate

The data of Table (11) show that the average percentage of the individuals who answered (agreed) was (24.95%), while the percentage of the individuals who answered (disagree) to those paragraphs was (24.85%), the average percentage of individuals who answered (somewhat agreed)

was (50.20%), and the value of the standard deviation was (0.65), and the arithmetic mean was (2.00), which is within the period ($2.33 \leq RII \leq 1.67$) In other words, the opinions of the researchers in general are oriented towards agreement to some extent about the paragraphs related to this site, and the rate of relative importance of the reality of the Ain Aqed site reached (0.67), which is a high relative importance.

At the micro level, paragraph (Q2), which represents the site, is characterized by an architecture commensurate with its therapeutic function, obtained the highest relative importance of (0.82) and the highest value of agreement in terms of the value of the arithmetic mean, which reached (2.46) with a standard deviation of (0.63), while paragraph (Q5), which represents the availability of modern and convenient tourist transportation with easy ways for tourists to reach the site, achieved the lowest relative importance of (0.54) and the lowest value of the agreement in terms of value The mean is (1.61) with a standard deviation of (0.65).

Table (11) Frequency Distributions, Arithmetic Averages, Standard Deviations and Relative Importance of the Reality of the Ain Aqed Site in the District of Akra in Duhok Governorate

Order of paragraphs	Relative importance %	Standard deviation	Arithmetic mean	Response Meter						Paragraphs
				Disagree (1)		Slightly agreed(2)		Agree (3)		
				Percentage	Number	Percentage	Number	Percentage	Number	
2	0.72	.63	.17	2.73	14	57.27	63	.00	33	Q1
1	0.82	.63	.46	7.27	8	39.09	43	.64	59	Q2
3	0.69	.69	.06	20.91	23	51.82	57	.27	30	Q3
4	0.66	.71	.97	26.36	29	50.00	55	.64	26	Q4
9	0.54	.65	.61	48.18	53	42.73	47	.09	10	Q5
5	0.66	.70	.97	25.45	28	51.82	57	.73	25	Q6
8	0.63	.63	.88	26.36	29	39.09	65	.55	16	Q7
6	0.65	.73	.95	29.09	32	46.36	51	.55	27	Q8
7	0.64	.68	.92	27.27	30	53.64	59	.09	21	Q9
	0.67	.67	.00	24.85		50.20		.95		Rate

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)

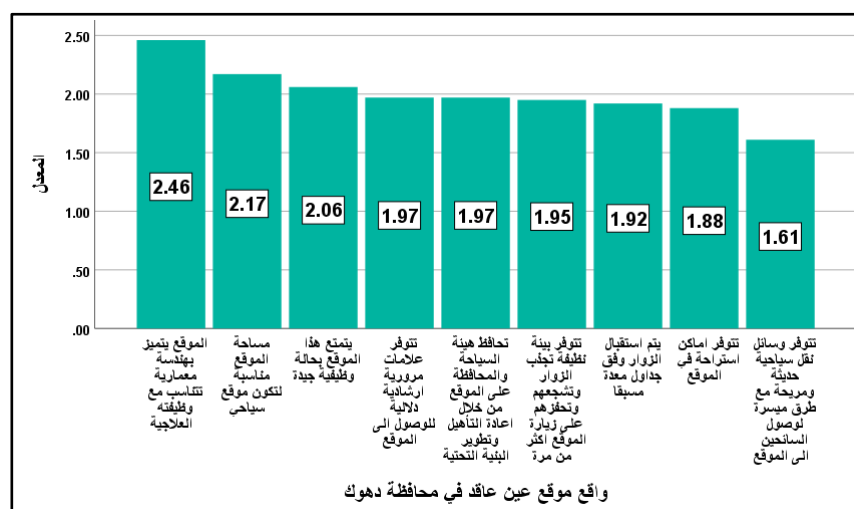


Figure () The order of the paragraphs related to the location of Ain Aqed in the governorate of Deh

6- Summary of the description of the current reality of some therapeutic sites in Iraq

Based on the above, it can be said that the majority of the answers to the current reality of the research treatment sites in Iraq were less than the hypothetical arithmetic mean of (2) according to the triple Liachard scale, and that Table (12) shows the order of the degree of acceptance of the current reality of some therapeutic sites in Iraq from the point of view of the sample of visitors benefiting from that site, through the values of the arithmetic mean, standard deviation and relative importance, it shows us that the most important acceptable site is the reality of the Hammam Al-Alil site in the city of Mosul It comes in the first place in terms of the value of the arithmetic mean of (2.01) and the standard deviation of (0.67) and the relative importance of (0.67), while the site of Ain Aqed in the district of Akra in Duhok governorate came in the second place in terms of relative importance in terms of the value of the arithmetic mean of (2.00) and the standard deviation (0.67) and the relative importance of (0.67)), in the third place came the location of Ayoun Hajlan in the district of Haditha in Anbar province in terms of the value of the arithmetic mean of (1.82) and the standard deviation of (0.64) with a relative importance of (0.61), and in the fourth place came the location of Ain al-Tamr in the district of Ain al-Tamr in Karbala province in terms of the value of the arithmetic mean of (1.77) and the standard deviation of (0.65) and the relative importance of (0.59)), and in the fifth place came the site of Lake Sawa in Al-Muthanna Governorate, in terms of the value of the arithmetic mean of (1.70) and the standard deviation of (0.63) and with a relative importance of (0.57), while the site of Ain Kubrit in the city of Mosul was found to be the least acceptable site for its current reality, in terms of the value of the arithmetic mean which reached (1.66) and the standard deviation (0.67) and with a relative importance of (0.55).

Table (12) Arithmetic Mean, Standard Deviation and Relative Importance of the Reality of Therapeutic Sites in Iraq

Order	Relative importance	Deviation normative	Arithmetic mean	Dimensions	t
First	0.67	0.67	2.01	The location of Hammam Al-Alil in Nineveh Governorate	1
Sixth	0.55	0.67	1.66	The location of Ain Kubrit in Nineveh Governorate	2
Third	0.61	0.64	1.82	The location of Oyoun Hajlan in Anbar province	3
V	0.57	0.63	1.70	The location of Lake Sawa in Al-Muthanna Governorate	4
Fourth	0.59	0.65	1.77	The location of Ain al-Tamr in Karbala Governorate	5
Second	0.67	0.67	2.00	The location of Ain Aqed in Dohuk Governorate	6

Source: Prepared by the researcher based on the outputs of SPSS V.26 (n=110)

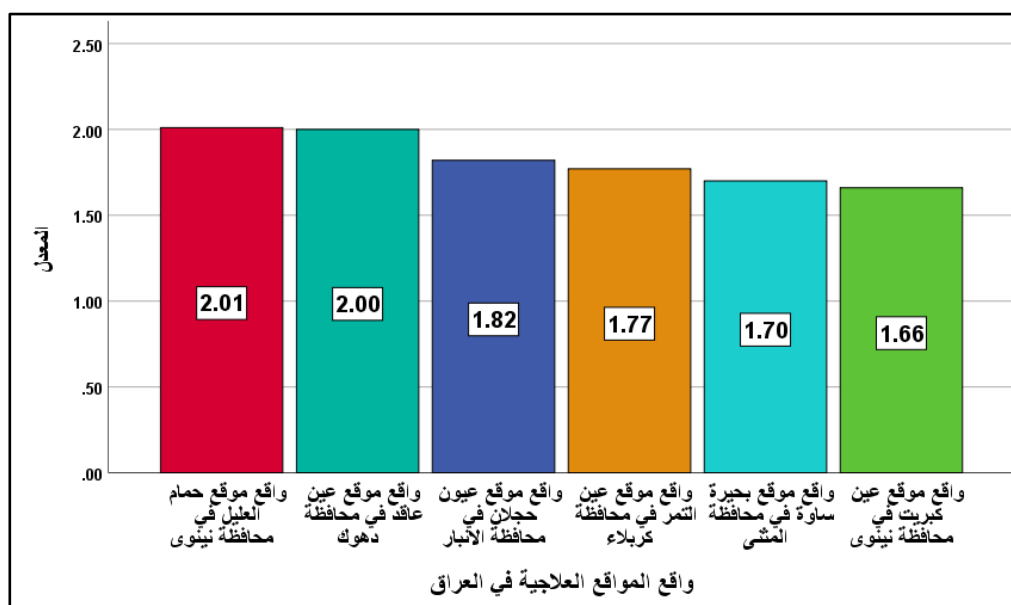


Figure () Title Figure

Seventh: Assessing the Reality of Therapeutic Sites in Iraq in General

In this paragraph, we will evaluate the reality of therapeutic water eye sites in Iraq, to answer the following question (are the therapeutic sites in Iraq in terms of their current reality acceptable from all aspects from the point of view of their visitors), and the (t) test for one sample will be used to indicate this, as this test is based on comparing the values of the arithmetic medians derived from the responses of the individuals researched towards the reality of each site under study with the median value (hypothetical mean) of the triple Licard scale The results indicated in Table (13) show the following:

1. There were no significant differences between the average of the reality of (Hammam Al-Alil in the city of Mosul) and (Ain Aqed in Duhok Governorate) from the value (2) in terms of the probability value (P-value) accompanying the test, which amounted to (0.835) and (0.983) respectively, which are greater than (0.05), as the average reality of the Hammam Al-Alil site in Nineveh Governorate was (2.01) and the average of the reality of the Ain Aqed site in Duhok Governorate was (2.00), and both results indicate that The reality in both locations is moderately acceptable.
2. There are significant differences between the average of the sites (Ain Kubrit in Nineveh Governorate), (Oyoun Hajlan in Anbar Governorate), (Lake Sawa in Al-Muthanna Governorate) and (Ayn Al-Tamr in Karbala Governorate) from the average value (2) in terms of the probability value accompanying the test, which amounted to (0.000) for each of them respectively, which is less than (0.05), as the average reality of the site (Ain Kubrit in Nineveh Governorate) was (1.66), while the average of the reality of the (Oyoun Hajlan in Anbar Governorate) reached (1.82) and the average reality of the site of (Lake Sawa in Al-Muthanna Governorate) reached a value of (1.70), and the average of the location of (Ain Al-Tamr in Karbala Governorate) reached a value of (1.77), and all the previous rates are less than (2), and this is a proof that the reality in each of the previous sites is not acceptable.
3. At the overall level of the sites, we find that their reality is not acceptable in terms of the probability value, which reached (0.000), which is less than (0.05), where the total average of the reality of the six sites reached (1.83), which is less than (2).
- 4.

Table (13) Results of the (t) test to judge the reality of the sites of therapeutic water springs in Iraq

One-Sample t-Test Results

	hypoetical Mean	tistic alue
Hammam Al-Alil – Nineveh Governorate	0.209	35
Ain Kabrit – Nineveh Governorate	-8.107	00
Oyoun Hajlan – Anbar Governorate	-4.536	00
Lake Sawa – Muthanna Governorate	-7.259	00
Ain Al-Tamur – Karbala Governorate	-5.324	00
Ain Aqid – Duhok Governorate	0.022	83
All Sites Combined	-5.526	00

Fourth Topic: Conclusions and Recommendations

First: Conclusions

1. Mesopotamian people believed that healing was linked to the will of the gods so that their medicine made a combination of religious rituals and therapeutic practices, as each aspect of treatment was associated with a specialized deity such as Enki, Ninsina, Kula, Damu, Ninazu, and Bao, reflecting a comprehensive religious therapeutic system that sees illness as a result of occult factors, and healing as a divine gift that is sought through supplication and sacred rituals.
2. Tourism is an important economic and social activity, its types vary according to its purpose, such as recreational, cultural, religious, medical, and environmental tourism. The development of tourism requires the availability of basic factors, most notably: security stability, good infrastructure, services, and effective tourism marketing, and in countries with cultural heritage such as Iraq, cultural, religious, and medical tourism represent opportunities Promising conditions, provided that the appropriate conditions are created and the tourism sector is developed in accordance with the available capabilities.
3. Medical tourism is an ancient human phenomenon that originated from man's natural need for healing, and has taken different forms since the dawn of history, which shows the depth of man's connection to the place as a means of treatment, the journey for treatment was not just a geographical transition but also a spiritual and psychological journey, as is evident in the symbolism of the Gilgamesh epic, which expresses the pursuit of immortality and physical and spiritual renewal, and temples also played a pivotal role in providing treatment, as they represented spiritual and medical centers, which confirms that the relationship between Religion and health were a close document in ancient societies, and contributed to the development of medical tourism as an organized practice.
4. Medical tourism is one of the most prominent types of advanced tourism, as it combines health care and recreation, and is based on natural or specialized medical components and is divided into preventive, hospital, and medical, each of which has a role in meeting various health needs, and the importance of this type of tourism is highlighted in being a promising economic source that contributes to improving the quality of life and the development of societies, and it also achieves multiple goals such as promoting health, stimulating the economy, and attracting investments, and despite its many advantages, such as diversifying sources of income and providing job opportunities, Medical tourism is not without challenges, most notably the uneven quality of services and weak control.

5. Iraq is one of the countries rich in natural resources that qualify it to be a prominent destination for medical tourism, as mineral springs, hot springs, and sulfur water are scattered from north to south, and are concentrated in locations such as Hammam Al-Alil, Ain Kubrit, Ain Al-Tamr, Lake Sawa and Ayun Hajlan. These resources are distinguished by their ability to provide therapeutic services for a number of skin, neurological and rheumatic diseases, in addition to their positive impact on relieving psychological tensions, which reflects the integrated integration between physical recovery and psychological comfort through The study population and sample described Table (2) through which it is shown that the percentage of males who visit the therapeutic water springs is the largest group, as they reached 69% compared to 31% of females, which clearly indicates that males are the largest group to demand this type of medical tourism, and this disparity is attributed to a number of factors, the most prominent of which is that men may be more exposed to physical fatigue or muscular injuries, in addition to enjoying more freedom of movement Travel, especially in conservative societies, may be viewed negatively by female visitors to therapeutic water springs, especially if they are in open spaces.
6. The results of the statistical analysis, as indicated in Tables (9, 10, and 11), indicate the poor level of services in the treatment sites, as the visitors did not visit the water springs repeatedly, which reflects a negative impression on the vast majority due to neglect or low level of interest. Better to ensure the sustainability of medical tourism, increase the confidence of visitors and motivate them to return.
7. By measuring the stability of the questionnaire in all treatment sites, it is clear that there is a high level of consistency and consistency in its results, which reflects the accuracy of its design and its effectiveness in measuring the opinions of visitors and evaluating the reality of the services provided in those sites, and this is confirmed by what is stated in Table (12) of the results of the "Cronbach's alpha" coefficient test for all sites, which is a strong evidence of the strength and stability of the form used in the study .
8. It cannot be said that the therapeutic sites in Iraq are acceptable from all aspects from the point of view of their visitors, as the results of the study show that the general evaluation of the sites does not reflect an acceptable level of satisfaction at the macro level, as visitors indicated in their responses that there is a weakness in the level of services, lack of care for facilities and infrastructures, as well as the absence of adequate promotion and organization, which indicates the need to reconsider the reality of these sites to better activate their therapeutic and tourism role.
9. The results of the study show that the most acceptable treatment site from the point of view of the sample of visitors is "Hammam Al-Alil" in the city of Mosul, where it obtained the highest value of the arithmetic mean and the lowest standard deviation, which reflects relative satisfaction with its services and current reality, while "Ain Kubrit" in Mosul was the least accepted among the studied treatment sites, which indicates the weakness of the services provided in it and the need to develop them.

Second: Recommendations

1. Issuing a special law regulating medical tourism, which includes the conditions for the use of natural resources, and mechanisms for their conservation, in addition to imposing penalties on violators who misuse these resources in hospital sites.
2. Launching awareness campaigns aimed at the local population and those working in the tourism sector, highlighting the importance of the sustainability of natural resources for therapeutic sites, through traditional media (television programs) and modern (social media sites).

3. Preparing and publishing brochures and brochures in several languages on medical tourism in Iraq, participating in specialized international conferences and exhibitions, in addition to producing promotional videos to showcase the country's therapeutic components, while providing competitive offers and incentives to tourists.
4. Providing financial and legislative investment facilities to investors wishing to develop hospital sites, especially sulfur springs and mineral baths, through partnerships with the public and private sectors.
5. Training and qualifying cadres working in the field of medical tourism, especially with regard to the mechanisms of treatment with mineral water, medical clay, and therapeutic environment, in cooperation with recognized medical and educational institutions.
6. Developing the infrastructure at the treatment sites such as improving roads, providing accommodation, electricity, telecommunications, and public utilities, which contributes to raising the level of visitor satisfaction and enhancing their desire to visit repeatedly.
7. Involve official health institutions in direct medical supervision of treatment centers, by integrating specialized doctors and physiotherapy experts within the medical tourism system, to ensure the provision of safe and scientific services.
8. Establishing an integrated national database of hospital sites that includes detailed data on water quality, medical characteristics, capacity, infrastructure, and visitor rate, to facilitate planning processes,

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29. THE TIGRIS RIVER IS MENTIONED IN THE SUMERIAN LANGUAGE IN THE FORM OF DIGNA AND IN THE AKKADIAN LANGUAGE IN THE FORM OF DIGLAT, AND THE RIVER WAS REFERRED TO IN THE OLD ERA AS MINIMAL, WHILE THE PERSIANS CALLED IT TAIKRA, WHICH MEANS AN ARROW INDICATING THE SPEED OF ITS FLOW, AND THE EUROPEAN NAME TIGRIS MAY HAVE BEEN DERIVED FROM THIS FORMULA, AND THE LENGTH OF THE TIGRIS RIVER IS FROM A SOURCE AT DIYARBAKIR IN TURKEY TO ITS MOUTH IN THE SHATT AL-ARAB IN SOUTHERN IRAQ IS 1718 KM, AND THE RIVER HAS FIVE MAIN TRIBUTARIES, NAMELY THE GREAT ZAB AND THE SMALL ZAB For more information, see Amer Suleiman, The Origin of the Names of Iraq's Main Rivers, Dijlah Center for Studies and Designs of Irrigation Projects, Mosul, 1994, p. 3.
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31. Hamid, Maha Saeed, The Impact of Mineral Water Treatment in Mosul through the Geographical Writings of Yaqt Al-Hamawi, Mosuliyat - A General Cultural Quarterly Magazine, Dar Al-Kutub and Documents - Baghdad, 2012, 37, p. 59.
32. AL-shahri. Y. others : a sulfur spring (Ain AL kibrit) ecosystem along tigris River Mosul, Iraq. Research Article. Journl of Adrnccd Laboratory, reserch in Biology. Vol. 7, No. 1, 2016, p9 .
33. Al-Dabbagh, Muhammad Nizar, previous source, p. 15 .
34. Al-Taie, Sahar Saeed Qasem, Firas Hassan Suleiman, The Geomorphological Diversity of the Bakerman Region and its Role in Achieving Tourism Development Using Geographic Information Systems and Remote Consultations, Journal of the University of Babylon for Humanities, Vol. 30, No. 8, 2022, p. 99
35. Bakkerman: The Bakkerman region is located within the mountainous areas in the northern and northeastern parts of Iraq, and is administratively located within the center of the district of

- Akra in the east of Duhok governorate. See: Al-Taie, Sahar Saeed Qasim, Firas Hassan Suleiman, *ibid.*, p. 83 .
36. The Khazir River: A river that flows into the Upper Zab, as it is one of its tributaries, and its course is between the Zab and the Tigris, it penetrates mountainous areas and fertile plains, and it is between Erbil and Mosul, then between the Upper Zab and the Tigris and its mouth in the Tigris River. See: Baban, Jamal, *The Origins of the Names of Iraqi Cities and Sites*, Baghdad, 1986, p. 103.
 37. Peppermint plant: a plant with a good wind and taste, the first appearance of the word mint was in Assyrian-Babylonian with the word (Ninnu Nu), then this word spread throughout the ancient East with a slight modification required by the nature of each language, Babylonian and Assyrian medicine used this plant in treatment, where it was used in the treatment of intestinal colic and was used to change bad breath. See: Bitar, Elias, *Sumerian and Assyrian-Babylonian plants, Dictionary and Comparative Study in the Light of Arabic*, Beirut, 2011, p. 360.
 38. Suleiman, Firas Hassan, *A Study of the Geomorphological Effects of Selecting Tourist Sites in the Bakkerman Region Using, GIS & RS*, Unpublished Master's Thesis, University of Mosul, 2022, p. 124 .
 39. Al-Tar Caves: The Al-Tar Caves series is one of the important archaeological sites of the holy province of Karbala-Ain al-Tamr district, and these caves are many that exceeded three hundred caves and at two heights, it is believed that the reason for their carving is due to defensive purposes and was then used as graves for burying the dead. See: Al-Zaidi, Abazar Rahi, *Al-Tar Caves Series - A Study in the Light of Archaeological Investigations and Excavations*, Journal of the Center for Kufa Studies, p. 2019, p. 535
 40. Al-Akhidar Fort: One of the prominent archaeological sites within the administrative boundaries of the holy province of Karbala, it is located 50 km southwest of the city of Karbala and about 152 km southwest of the city of Baghdad, and its location in the middle of the desert is of great historical importance as it is the junction of many trade routes. See: Al-Zaidi, Abazar Rahi, *Al-Akhidar Fort: A Study in the Light of Archaeological Investigations, Excavations and Maintenance*, Al-Ameed Magazine, Karbala, Vol. 1-2012, 2, p. 543.
 41. Al-Razzaza Lake: Al-Razzaz Lake is one of the surface water sources in the district of Ain al-Tamr, as it is located 18 km from the center of the city of Karbala, and the lake consists of two depressions, namely the western depression called Bahr al-Salt and the other is the Abu al-Dibs depression in the southeastern part, and it is one of the tourist areas. .
 42. Al-Bajari, Abdullah Hassan, *The Role of Tourism in Economic Development (Karbala Governorate in Iraq as a Model)*, Wamid Al-Fikr Magazine, p. 19, 2023, p. 100
 43. Prism, Maha Aref, et al., *Strategic Leadership and its Impact on Medical Tourism in the Ain Al-Tamr Region - An Exploratory Study at the Ministry of Tourism and Antiquities*, Journal of Management and Economics, p. 110, 2017, p. 173 .
 44. Al-Taie, Zahraa Muhammad Jassim, *Development of Medical Tourism in the Ain Al-Tamr Region*, Unpublished Master's Thesis, University of Baghdad, 2005, p. 1 .
 45. Al-Hasnawy, Zainab and Nass Khudair, *Geomorphological Analysis of the Origin and Development of Lake Sawa and its Presentation for Tourism Development Projects*, Journal of Geographical Research, Vol. 22, 2013, p. 377 .
 46. Euphrates River: One of the two main rivers in Iraq and originates from the highest mountains in Turkey in the area north of Lake One and south of the Black Sea, and it has two springs, namely (Euphrates Sow and Murad So) The river enters Iraqi territory at the city of Al-Qaim, the length of the river is (2300) km, it is located (1200) inside Iraqi territory, the Sumerians

- called it PU-RANU-NU, the Babylonians and Assyrians named this river Pu-RAT-TU. See: Baban, Jamal, *The Origins of the Names of Iraqi Cities and Sites*, Baghdad, 1986, p. 219
47. Hassan, Marwa, et al. Hydrological Study of Lake Sawa - Al-Muthanna Governorate - Iraq, *Journal of Humanities and Social Sciences Studies*, Vol. 49, No. 2022, 3 .
48. Saadi, Karam, Lake Sawa "The End of a Beautiful Thing" in Iraq, *Al-Araby Al-Jadeed Newspaper*, p. 2022, 2803 .
49. Modern City: It was named by this name because of the modernity of its construction, and due to the existence of several cities named by the same name, Arab historians and geographers added other qualities to distinguish it from the modernity of Mosul, and therefore they called it the Hadith of the Euphrates and the Hadith of Al-Noura, which is one of the major cities of the Euphrates. See: Al-Hamawi, *Dictionary of Countries*, vol. 2, p. 230, Al-Maqdisi, Abu Abdullah Muhammad bin Ahmed, *Ahsan al-Taqaṣim fī Ma'rifat al-Aqḷaim*, 3rd edition, Beirut, 1991, p. 138.
50. Al-Shammari, Muhannad Musharraf Shehab, *The Architecture of Landmark Heritage Buildings in Anbar Governorate (Field Study)*, Unpublished Master's Thesis, University of Baghdad, 2023, p. 20 and p. 121 .
51. Al-Hadithi, Talal Salem, *The Spirit of the Modern City*, *Al-Mada Cultural Magazine*, p. 624, 2006 .