

THE UNIVERSAL IMPACT OF THE HEALTH CRISES ON THE INTERNATIONAL TOURISM: THE COVID-19 PANDEMIC AS A CASE

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Abstract

This study aims to explore the impact of the Covid-19 pandemic on the components of the international tourism (the international tourists arrivals, the international tourists receipts, Hospitality and restaurants, The employment in tourism.); to achieve this purpose, we divide the paper into two axes, the first is devoted to the literature review of the issue, while the second is devoted to studying a set of studies and statistics issued by a group of the international reports. Finally, the initial results at the beginning of this pandemic indicate a decrease in the international flows of tourists by about 30% in the first semester of 2020 relative to 2019 as a result of the quarantine, which will negatively affect all components of the international tourism sector.

Keywords: health crises, covid-19, tourism, pandemic, international tourism.

1. INTRODUCTION

Tourism is an important sector for the economies of countries, as it contributes to increasing the national income, the GDP, providing job opportunities, and creating a dynamism at the local, regional and national levels; The tourism sector also witnessed a significant development from the 1950s to the now day (Benbouziane & Benhabib, 2016). On the other hand, the humanity has known a group of crises such as natural disasters (floods, hurricanes, volcanoes and earthquakes), geopolitical

crises(wars, politic conflicts), economic crises(the global economic crisis of 1929 and 2008), and health crises especially in the twentieth century (the Spanish influenza 1918-1920, Malaria 1969-1975-1988, yellow fever 1971-1999-2000-2010, SARS 2003, Avian influenza(H5N1) 1996-2017, Swine flu(H1N1) 2009, Ebola 2014, MERS-COV 2015, Zika virus 2014-2016 (Menegaki, 2020; Damir Huremović 2019). In December 2019, the International Health Organization (WHO) declared the pandemic of covid-19 or coronavirus; this pandemic characterise with the rapidity in spread in all over the world (216 countries) in short time (six months) and an outcome of (approximately 8.5 million infected and more than 455 thousand deaths, till the 20th of June, 2020) still continue to register the new cases every moment (WHO 2020); As measure to limit the spread of this pandemic many countries adopted a set of measures as the social distancing, the quarantine and the Close of the borders; But this measures have a positive aspect on health, and a negative aspect on the economy in general and tourism in particular; Therefore, the research paper aims to try to assess the impact of the covid-19 pandemic on the tourism sector at the international levels as well as the national level, also a contribution to enriching this kind of studies because it is characterized by a lack of researches interested in assessing the impact of crises in general and the health crises in particular. Therefore, from the above, we will try to provide an answer that focusing on the following issue:

What is the impact of the health crisis of covid-19 pandemic on the international tourism?

This paper target to answer a set of questions that can be summarized as follows:

- What is the importance of the tourism sector in the economic development?
- What are the factors affecting the tourism sector?
- What means by the crisis in the general and the health crisis in the particular?
- What kinds of crises affect the tourism sector?
- What is the impact of the health crisis on tourism?
- How can affecting the covid-19 pandemic the components of tourism?

To achieve this purpose, the research paper is divided into two axes in addition to the introduction and the conclusion. Where the first axis is devoted to the literature review of the study and consists of two sections (the first is an overview of tourism and health crises and the second the relationship between tourism and health crises). And the second axis is devoted to study the impact of the covid-19 on the international tourism as: the international tourists' arrivals, the international tourists' receipts, Hospitality and restaurants, the employment in tourism.

2. THE LITERATURE REVIEW

2.1. An overview of tourism and health crises:

According to the World Tourism Organization (WTO) indicates that tourism as a phenomenon witness a great development, starting from the fifties years, for instance, since 1990 international flows have been 439 million tourists to pass this number in 2015 to Approximately 1.2 billion, with an increase of about 270%; the International tourist arrivals worldwide grew 4% in 2019 to reach 1.5 billion, based on data reported by destinations around the world. Tourism contributes 9% of the GDP, create one job of every 11 jobs at the international level and contribute to 7% of the international exports and get 29% of the service exports (WTO, 2015; WTO, 2019).

However, there is a large variety of factors affecting the tourism industry. that we can summarize as follows: The first component of the macro environment factors that affecting the tourism is the model of PLESCTE; the second component of the micro environment that can affecting the tourism is linked to the sector itself, like the competitiveness, supply chain and the alternative opportunities. in the end, the element related to the tourist and his behaviour and the sensitive to the information and media (Benbouziane & Benhabib, 2016; Benbouziane, et al., 2019). Studies indicate that the tourism sector can create a great dynamic in more than 50 sectors, but it is very sensitive to crises in general and health crises.

Faulkner (2001): "Define a crisis as an event which disrupts an organization's (or destination's) functioning, and of which a large part of its effects can be prevented or reduced by human efforts" (Hsiao-I et al., 2008). The term crisis has to be classified according to temporal aspects and to the nature of the crisis; According to temporal aspects, crises can be ranged in three time periods: Potential crises are threats that might occur in the future; they are neither ascertainable, nor are they already existent. Nevertheless, they have to be identified and considered in order to be able to prepare accordingly for the case of an imaginary crisis becoming reality; a latent crisis on the other hand is already occurring; it is a critical situation that is existent, but does not yet have a measurable negative influence; once a critical situation has turned into an acute crisis, its destructive effect can be clearly perceived and measured (Hanno Michail Martens et al., 2016). And according to the nature of the crisis; for example: the geopolitics crises, the naturel disasters and the climate change, the economic crises and the health crises that we will focus our analyses.

For example, the impact of the geopolitics crises, we have a study show a strong evidence that human rights violations, conflict, and other politically motivated violent events negatively affect tourist arrivals; also, even if autocratic regimes do not resort to violence, they have lower numbers of tourist arrivals

than more democratic regimes/ Also, we have an empirical research (Jaume Rossello et al., 2020) to confirm the nature and extent of impacts of disasters on tourism.

The global economic crisis of 2008-2009 has a significant impact on the international tourism, the most severe so far in the last decades; International tourist arrivals declined by 4% and international tourism receipts by 6%; however, the sector rebounded strongly (international tourist arrivals grew by 7%) in 2010 (Global Pulse report, 2011). Below, we will focus our analyses on the health crises.

Since ancient eras, humanity has known many health crises and epidemics. For example: the Athenian plague of 430 B.C Where it appeared in Greece, the Antonine plague of 165-180 A.D that appeared in the Romain empire, the black death of 1334 A.D (China, Europe) and the Justinian plague of 1550 A.D that appeared in Ethiopia and spread to Egypt and central Asian steppes (Damir Huremović, 2019). From the beginning of twentieth century to nowadays, health crises and epidemics continued despite the improvement in living conditions compared with ancient eras; these epidemics can be summarized as follows: the Spanish influenza 1918-1920, Malaria 1969-1975-1988, yellow fever 1971-1999-2000-2010, SARS 2003, Avian influenza(H5N1) 1996-2017, Swine flu(H1N1) 2009, Ebola 2014, MERS-COV 2015, Zika virus 2014-2016, covid-19 2019 (Menegaki, 2020; Damir Huremović, 2019). The studies of (Menegaki, 2020; David Baker, 2015; Damir Huremović, 2019; Hsiao-I. Kuo, et al., 2008; Jaume Rossello et al., 2017) shown the historic review of the health crises or pandemic and their effects on the economy and the tourism industry:

- The Spanish influenza or flu 1918-1920: the most countries affected with this pandemic are the USA, China, Spain, France and Austria. With a result of death more than 50 million, possibly 100 million dead (Damir Huremović 2019). The Spanish flu led to a loss of only 1.6% of GDP in its incidence year; Since, tourism was not a massive phenomenon at that time because took its first steps as a more massive phenomenon from 1950 (Menegaki, 2020).
- Malaria 1969-1975-1988: the countries affected with this pandemic are the Mauritius in 1969, Morocco, Oman and the Arab Emirates, Asia and Latin America in 1998, which killed more than 405 thousand; with an insignificant impact on tourism except the countries affected (Menegaki, 2020).
- Yellow fever 1971-1999-2000-2010: the countries affected with this pandemic are the Caribbean, Central and South America, Western Pacific Islands, Australia, Southeast Asia and Africa and overall, in more than 100 countries with more than 30 thousand of death annually. Yellow Fever decrease the flux tourists to 8.1 million, representing a loss of 4975 million US dollars and a decrease of 30% in the tourist flux to affected countries (Jaume Rossello, 2017).
- SARS 2003: first appearing in Southern China in November 2002 and spreading in all over the world, with 8000 people of death approximately (WHO, 2003), but with a huge impact on economic and tourism, that the Reduction in international tourism and travels is undoubtedly one of the economic

implications of infectious pandemics; the virus spread is likely to cause a 20% to 80% reduction in flights during the summit of infection spread; these percentages however vary based on the severity of the infections, the period of the pandemic and the number of countries affected (Wanjala, 2020). also estimated that approximately 3 million people in the tourism industry lost their jobs following the epidemic of SARS in the most severely affected countries of China, Hong Kong, Vietnam and Singapore, which resulted in losses of over \$20 billion in terms of GDP (Hsiao-I., 2008). SARS and the associated travel advisories led to significant decline in international tourist arrivals in 2003; the World Tourism Organization reported that arrivals to some affected countries in Asia dropped to less than 50% of their usual levels; although the region rebounded quickly, SARS was responsible for a 9% overall loss in travel volume for Asia in 2003 and had substantial economic impact (David Baker, 2015).

- Avian influenza (H5N1) 1996-2017: Initially this virus was traced in Asia but it was later spread in Europe and Africa as well, the transmission from human to human is of low probability and hence it is a virus that does not affect tourism so much (Menegaki, 2020).
- Swine flu (H1N1) 2009: In June 2009, World Health Organization announced the pandemic of H1N1 with 18,500 deaths in 214 countries (Menegaki, 2020). The world tourism organization organised a workshop about this pandemic for minimising the negative aspect on the international tourism (Paulo Fernando Piza Teixeira, 2009; Misty Pinson, 2009; Kelly Holton, 2009). reported that there was a loss of 12 million arrivals in Asian and Pacific countries following the outbreak of the Avian Flu epidemic; the international tourism is affected by the measures to prevent the spread of Avian Flu and pandemic influenza; For example in the 2004, Avian Flu spread in Vietnam led to a 1.8% decline in GDP, where a 5% decline in tourist arrivals could lead to a 0.4% decline in GDP; furthermore, the World Bank estimated that the global economic influence of an outbreak of Avian Flu over US \$800 billion, equal to 2% of world economic output (Hsiao-I., 2008).
- Ebola 2014: from 2013 to 2016 Ebola virus disease led to about 11,300 deaths especially in Africa. and In terms with the economic impact, it estimated of 53 billion US\$ loss from the economic and social impact of Ebola in West Africa and 20% drop in Sierra Leone's GDP in 2015; This outbreak has also taught us, that even when the health impact of an epidemic is relatively limited, its economic consequences can be devastating and long-lasting; as an example, Liberia's GDP declined 8% from 2013 to 2014 (Fernandes Nuno, 2020).
- Mers-Cov 2015: Initially this virus appeared in Egypt and Saudi Arabia, but it was later spread to the South Korea (Stefan Gössling et al., 2020). In terms with the tourism impact; as an example, Seoul

had lost 38% of its foreign tourists during the first two weeks after the outbreak; also, transit tourists were reduced to 12% (Menegaki, 2020).

- Zika virus 2014-2016: In 2016, World Health Organization declared that Zika virus as public health emergency of international concerns; Brazil had experienced this pandemic disease with 1.4 million cases (Wasiul Karim et al., 2020). Zika has continued to spread throughout South America, Central America, the Caribbean, and several states within the USA (Damir Huremović 2019). Estimated the effects on tourism in the affected countries to be about to 63.9 billion US\$ (Menegaki, 2020).
- The covid-19 pandemic 2019: The new pandemic of covid-19 or coronavirus that appeared in Wuhan (China) in December 2019 that spread rapidly around the world (216 countries) with an outcome of (according to the WHO: Approximately 8.5 million infected and more than 455 thousand deaths, in the 20th of June, 2020). The Countries most affected by the pandemic are: USA, Brazil, Russia, India, UK, Spain, Italy, Peru, Iran, Germany, and French. There are several studies that attempt to provide the effect of the covi-19 pandemic on the economy in general and tourism, Below, we have some studies of countries that we found:

Sri Lankan in 2019, the Contribution of travel and tourism to GDP growth rate is 11.4%, also hit by this pandemic and as per the Sri Lanka Tourism Development Authority data a decline of 30% of the total tourist arrivals compared to Q1 of 2019. Moreover, the decline in tourism revenue for Sri Lanka could vary between USD 107 million – USD 319 million (Ranasinghe Ruwan et al., 2020)

In India, the tourism is important sector for the economy and is growing rapidly. The World Travel and Tourism Council calculated that tourism generated about US\$240 billion as 9.2% of India's GDP in 2018 and supported 42.673 million jobs as 8.1% of its total employment; also, the sector was predicted to grow at an annual rate of 6.9% equivalent of US\$450 billion and 9.9% of GDP by 2028; but after the appears of the pandemic, there is an decrease in the international tourists inbound about 7% in February 2020 compared with the same period of 2019 as a result of the travel restrictions (Manjiri D. Kalyankar, 2020; Amit Kumar, 2020).

The Malaysian government recorded losses of as much as 800 US\$ Million within first two month of the year of 2020; the most obvious effect of the pandemic is the decrease of inbound international tourists to the most frequented destinations in Malaysia; the government estimated that the GDP deteriorated by 0.8% to 1.2%; however, the government imposed an entry bans on travellers from mostly affected countries such as Italy, Iran, South Korea; so as a result of all this measures, it might impact the government's target to achieve 30 million arrivals during the campaign of "visit Malaysia 2020"; also the discount vouchers offered during the pandemic with of 22 US\$ per person because government has allocated US\$113 million to support the tourism industry (Wasiul Karim, 2020).

In the China, the revenue from domestic trips is the most profitable sum of capital; China's annual revenue from the tourism industry is about US\$ 725 million; with the impact of this pandemic spreading across the Asian continent; according to the country's tourism bureau, China alone brought about \$127.3 billion in the year 2019; but by February and March 2020, The rate of cancellations of travel and tourism agreements with China and other Asian countries is increased; also, Near about 75% of travellers of Luxury Travel agency have suspended their tickets for Southeast Asian countries (Ashikul Hoque, 2020). As a result of this pandemic, is expected that the tourism sector will contribute in the Chinese GDP with 0.3% for the year 2020-2021 (Mario Arturo Ruiz Estrada, 2020).

Kenya recorded a significant performance in tourism in 2019 that The total revenue realize by the sector is about USD 1.63 million and international tourist arrivals at 2048834 and 2025206 in 2018; despite Kenya haven't witness a huge infected with this pandemic; there is a study expect the loss revenue of the tourism sector based on tow scenario; If the situation lasts for only one quarter the revenue will decrease less than 20%, because Kenya receives a low number of tourist arrival in the first and second quarter; But if the pandemic is persistent and lasts till December 2020 or extends to 2021, then the pandemic will have a significant effect on the tourism sector with a more than 80% reduction in the revenues (Wanjala, 2020).

2.2. The relationship between tourism and health crises

To study the relationship between tourism and health crisis and according to the studies that we found we subdivide into tow kind of relationships, the first the impact of tourism to spreading the pandemic and health disaster and second the impact of the pandemic and health crisis to restrain the tourism sector.

2.2.1. Growing relationship between tourism and pandemics

Indicate that one of the inevitable effects of globalization was increasing international travel and the emergence of infectious diseases; Numerous epidemic and pandemic diseases that have caused global concern for the World Health Organization (WHO) include SARS, Avian Flu, malaria, cholera, anthrax, tuberculosis, hepatitis and other diseases which can spread easily through international travel; The results indicate that the numbers of affected case shave a significant impact on SARS-affected countries but not on Avian Flu-affected countries; however, since the potential damage arising from the Avian Flu and subsequent pandemic influenza is much greater than that resulting from the SARS (Hsiao-I, 2015) shown the contribution of the tourism in the spreading of the pandemic like: SARS, MERS, Ebola virus, influenza Seasonal and Pandemic.

2.2.2. Decreasing relationship between pandemics and tourism

To study the relationship between pandemics and tourism, there are a set of indicators to show the impact, as the number of infected and deaths and the speed of spread contribute to decrease the indicators of the economy in general and tourism in particular, such as: tourism flows, tourism revenue, air and cruise ship transportation, trade and consumption of electric energy as a result to close restaurants, shops, entertainment places and restaurants (Mario Arturo Ruiz Estrada, 2020). The result of the study achieve by (Nashirah Abu Bakar & Sofian Rosbi, 2020) that COVID-19 creates panic among public that contributes to lower demand in tourism industry; this is one of effect because of disease spreading including lockdown approach that implemented; this scenario, contributes to lower demand price by customer; therefore, according to market equilibrium of supply-demand theory, the price of tourism sector is keep decreasing parallel with decrement in demand (Nashirah Abu Bakar & Sofian Rosbi, 2020). The study of (Matteo Chinazzi et al., 2020) shown that the travel quarantine of Wuhan contributed to delay the overall pandemic progression by only 3 to 5 days in china, but had a more marked effect on the international scale, where cases inbound reduced by nearly 80% until mid-February; a modelling results also indicate that sustained 90% travel restrictions to and from China only modestly affect the pandemic trajectory unless combined with a 50% or higher reduction of transmission in the community (Matteo Chinazzi et al., 2020).

As a result of the relationship between tourism and health crises, we can conclude that more tourism flux contributes to the spread of epidemics and health crises, and vice versa, that more of epidemics and health crises limit the development of tourism.

3. THE IMPACT OF COVID-19 ON TOURISM

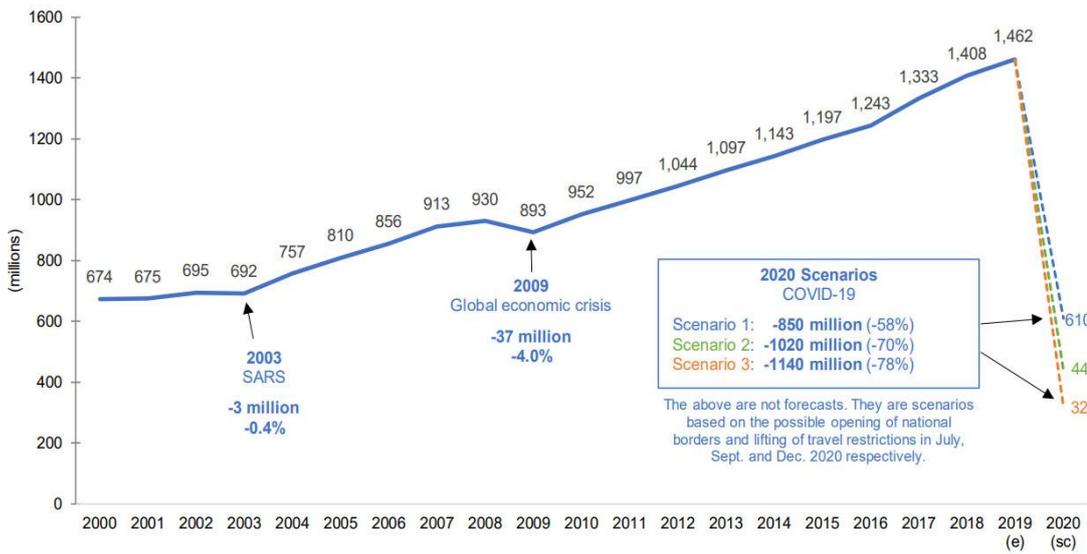
3.1. The International Tourist Arrivals and Receipts:

In the beginning of this pandemic the world tourism organization (WTO) predicted an decrease of 30% as an equivalent of 440 million tourists and USD 450 billion; but after the significant spread of the pandemic in a large scale and the restrictions measures the world tourism organization adopted three scenarios for predict the impact of the covid-19 on the international tourism in 2020; they reflect three possible patterns of monthly change in arrivals from April to December 2020 supposing that travel restrictions start to be lifted and borders reopen in July (Scenario 1), in September (Scenario 2) or December (Scenario 3) (WTO, 2020). The first scenario an decrease of 60% as an equivalent of 850 million tourists and USD 910 billion as revenue; in the second scenario an decrease of 70% as an equivalent of 1020 million tourists and USD 1080 billion as revenue and in the third and last scenario an

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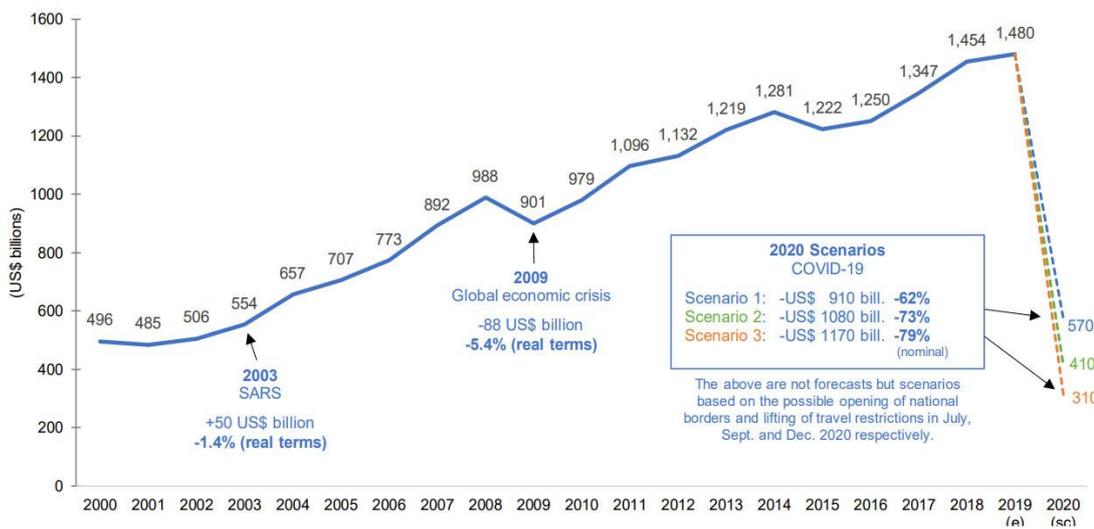
decrease of 80% as an equivalent of 1140 million tourists and USD 1170 billion as revenue. Also, we note that in a short time there is a significant impact of this pandemic on the International Tourist Arrivals and Receipts compared with the past crises as the SARS an decrease of 0.4% in 2003 and the global economic crisis an decrease of 4% in 2008.(see the Graph 1 and 2)

GRAPH 1: COVID-19 SHOCK ON THE INTERNATIONAL TOURIST ARRIVALS:



Source: World Tourism Organization (UNWTO) (e) Estimate (sc) Scenario-based data

GRAPH 2: COVID-19 SHOCK ON THE INTERNATIONAL TOURIST RECEIPTS:



Source: World Tourism Organization (UNWTO) (e) Estimate (sc) Scenario-based data

3.2. The International Transportation

To take into account the critical situation with COVID-19, IATA estimated the potential impact on passenger revenues based on two possible scenarios: limited spread and extensive spread; this scenario applies a similar methodology but to all markets that currently have 10 or more confirmed COVID-19 cases (as of 2 March); the outcome is about 20% loss in worldwide passenger revenues, which equivalent to about USD 113 billion; financially, that would be on a scale equivalent to what the industry experienced in the Global Financial Crisis or more than because the pandemic still exist and the long measures for reopening borders around the world (IATA, 2020). (see Table 1)

TABLE 1: THE IMPACT OF COVID-19 ON THE GLOBAL AIR TRANSPORT INDUSTRY

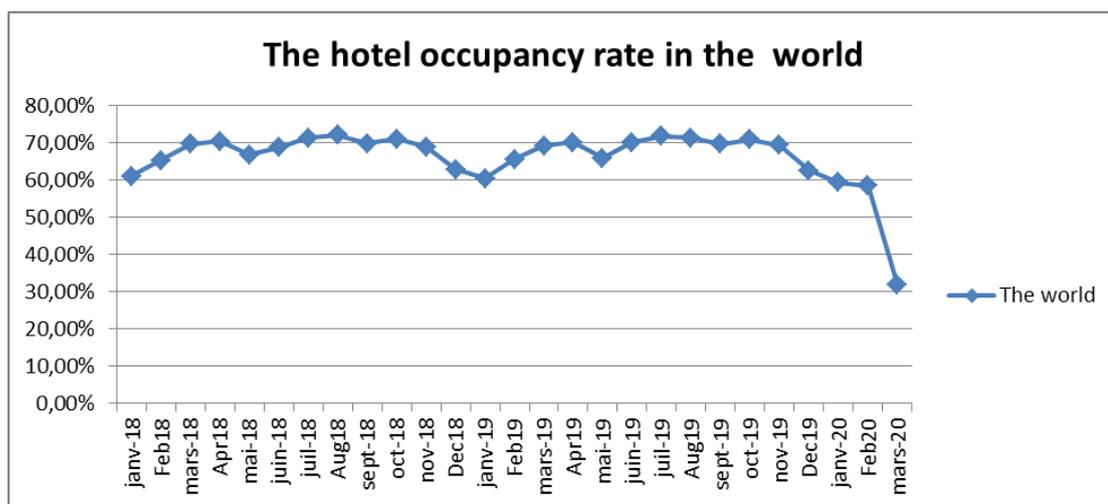
MARKET	IMPACT ON PASSENGER NUMBERS	IMPACT ON PASSENGER REVENUES
Australia, China, Japan, Malaysia, Singapore, South Korea, Thailand, Vietnam	-23%	-\$49.7 billion
Rest of Asia Pacific	-9%	-\$7.6 billion
Austria, France, Italy, Germany, Netherlands, Norway, Spain, Switzerland, Sweden, the United Kingdom	-24%	-\$37.3 billion
Rest of Europe	-9%	-\$6.6 billion
Bahrain, Iraq, Iran, Kuwait, Lebanon, the United Arab Emirates	-23%	-\$4.9 billion
Rest of Middle East	-9%	-\$2.3 billion
Canada and US	-10%	-\$21.1 billion

SOURCE: IATA 2020

3.3. Hospitality and Restaurants

According to the results published by Statista In mars 2020, as a result of the coronavirus (COVID-19) pandemic the hotel industry taken a decrease in 2020 that we noted a decrease of 32% starting from December 2019, also we noted a decrease of 40% starting from October 2019 (Statista, 2020). the hotel occupancy rate in Europe and Asia witnessed a significant effects of the pandemic, with occupancy rates of 26%, 28% so with a decrease of 40% and 40% respectively compared to the same period of the last year; Either in the middle east/Africa and America the occupancy rates of 34%, 39% so with a decrease of 49% and 57% respectively compared to the same period (Mars) of the last year (see the Graph 3); and about the effect of the covid-19 pandemic on the restaurants at the international level, according to the global restaurants consultant (GRC report, 2020) the sector known a significant decrease estimated about 90%.

GRAPH 3: MONTHLY HOTEL OCCUPANCY RATES IN THE WORLD FROM 2018 TO 2020.



SOURCE: BY AUTHORS 2020

3.4. The employment loss in tourism

According to the results published by Statista in mars 2020, as a result of the covid-19 pandemic, the global travel and tourism market is predicted to know a loss of 100.8 million jobs worldwide in 2020 (Statista, 2020). The region that is supposed to know the biggest loss from COVID-19 is the Asia Pacific region, losing approximately 63.4 million jobs, while Europe is predicted to be the second hardest hit with a loss in employment of 13 million (Statista, 2020). (See the Table 2).

TABLE 2: PREDICTED EMPLOYMENT LOSS IN TOURISM INDUSTRY DUE TO (COVID-19) PANDEMIC WORLDWIDE IN 2020, BY REGION (IN MILLIONS)

The Region	Asia Pacific	Europe	North America	Africa	Latin America	Middle East	Caribbean	The total
The number of job loss	63.4	13	8.2	7.6	4.7	2.6	1.2	100.8

SOURCE: (STATISTA 2020).

4. CONCLUSION

From the literature review and the analytical part of this study we note that the impact of the covid-19 pandemic or this health crisis is more strongly than the previous crises in general and the health crisis in particular; and these effects differ from a region to another and a country to another depending the degree of the spread, the number of infections and deaths, as well as depending to the tourist seasons. so in such type of crisis, which is very unpredictable and uncertain, it is very difficult to make any kind of forecast for the further development in economy and particular in tourism sector (Manjiri D. Kalyankar &

Priyanka Patil, 2020); because there is a significant number of infected and death around the world; also we have a partial reopening of borders and no vaccine.

In this context, health experts advised to co-exist with the covid-19 pandemic and the respect of the measures of social distancing; because as much as the impact of epidemics on tourism, it increases the process of its spread through the movement of tourists and the number of flights in particular; Therefore, it is desirable to adopt a vigilance systems and protocols for detecting the potential viruses and protecting the tourists; also In the modern history of infectious diseases outbreaks such as MERS, SARS and Ebola, 85% of the total economic impacts of pandemics are associated with behavioural effect (Wanjala, 2020). Many experts explain this behaviour as a result of the influence of the media and social media networking. in the last, about the restarting of tourism sector after this pandemic, we have a group of expert opinions; an optimist viewpoint that the restarting of tourism in short terms expected between two and three years and a pessimist viewpoint that the restarting of tourism in long terms expected between three and seven years.

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