Empirical analysis of COVID-19 induced socio cognitive factors and its impact on residents of Penang Island

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Abstract
Purpose – Pandemic like coronavirus (COVID-19) poses a major challenge to countries like Malaysia where tourism is one of the major contributors to the national gross domestic product. Pandemics observed through the years have not only presented a medical challenge but also had a large impact on the psychological well-being of society. Overcoming these challenges required a strategically structured response on the medical and social front. To achieve the said goal on the social front, it is necessary to understand the cognitive appraisal and response of the public during this stressful environment. The restricted movement control used to curb the further spread of the disease drastically hampered tourism in Malaysia. This study aims to follow a statistical analysis based on the cognitive appraisal theory to understand the impact of COVID-19 on the public residing in Penang Island which is one of the most famous tourist destinations in the world.

Design/methodology/approach – A cross-sectional, observational study design was carried out for this research. Snowball sampling technique was used and the data was collected via a semi-structured online questionnaire measuring the psychological health of people present in Penang Island.

Findings – The study reports a positive response in terms of disease awareness and proper observation of preventive measures, yet a high level of pandemic induced anxiety was statistically estimated. The study proposes mental health care initiative to help those affected by the COVID-19 pandemic.

Originality/value – This study reports a possible link between the mental wellness of the residents and domestic tourism in Penang Island during the COVID-19 pandemic.

Keywords Attitudes, Tourists, Anxiety, Tourism destination, COVID-19, Cognitive appraisal theory, Psychological impact

Paper type Research paper

1. Introduction

Several infectious diseases of historic proportions such as the Spanish Flu, the Great Plague and Severe Acute Respiratory Syndrome (SARS) have caused millions of deaths through the ages. In 2002, the SARS was declared pandemic and was the cause of 776 deaths across 26 countries (Wilder-Smith, 2006). The worst of these pandemic diseases was the Great Swine Flu, also known as the Spanish Flu. First World War killed almost 21 million people over four years’ time, while the Great Swine Flu killed the same number of people in just four months (Oxford et al., 2002). These pandemic viruses killed 300 million people overall in the twentieth century.

The coronavirus (COVID-19) is not the first one labeled as a pandemic, but the infection rate of COVID-19 is much faster as compared to the SARS or other viruses. This disease originated in Wuhan, Hubei Province, China November 2019 and was labeled as a global epidemic on January 31, 2020, by World Health Organization (WHO). The total number of confirmed infected cases up till 28th of April were 2,954,222 and the confirmed death toll...
160,120 across 213 countries (WHO, 2020). COVID-19 spreads through different ways such as having contact with an infected person or touching a surface or object that has a virus on it and then touching eyes, mouth or nose (WHO, 2020).

The severity of the COVID-19 infection has created panic and fear among the general public (Garfin et al., 2020; Qiu et al., 2020). Studies report that the lockdown or restricted movement has been responsible to incite symptoms of psychological stress such as depression, anxiety and post-traumatic stress disorder. The focus of this study is anxiety as it is an important psychological disorder that further incites the development of additional psychological disorders and also is reported as a cause for the decrease in immunity (Liu et al., 2020). Contemporary studies have shown that people were scared during self-isolation and were seriously worried about themselves and their families being infected by the COVID-19 virus (Qiu et al., 2020). They avoid health care and tend to hide their illness (WHO, 2020). Anxiety can also become a cause for depression and can occur at the same time. Everyone has their own psychological resources to deal with the stress of life to maintain their mental health (Mahmoud et al., 2012; Slovic and Peters, 2006) but as COVID-19 is a new type of virus without any treatment or vaccination, people feel vulnerable and afraid. To protect people from COVID-19 infection, countries all over the world imposed quarantines, social distancing and travel restrictions. This situation not only created an economic recession but also disrupted the psychological well-being of people all over the world. Tourists, both international and local, experienced a stressful journey when their travel was cut short and instead were quarantined in their homes. The resulting psychological pressure on people all over the world increased exponentially (Lim et al., 2004). A mechanism to evaluate this stress needs to be standardized to address the coping mechanisms.

For this study, cognitive appraisal theory was used to evaluate the perception of stress and its impact on psychological well-being (Folkman and Lazarus, 1984). The theory postulates that in the primary cognitive appraisal of stress, the individual analyzes whether the event has a good or bad impact while secondary appraisal defines the coping mechanism adopted by the individual. This study follows the theory in assuming that the stress and its response is a result of a combination of the stimulus (COVID-19) and the individual perception and response. Once the stress stimulus is deemed important by the individual, they then analyze whether it poses an adverse challenge and whether the situation has an overwhelming capacity. If the answer to these questions is affirmative, then the stress is observed as a threatening event by the individual and a secondary appraisal of the stress occurs. The secondary appraisal represents a wholesome evaluation of the individuals’ management capacity along with the resources available to supplement the coping process.

In this study, the primary appraisal is measured using the public attitude toward the stress situations presented due to the COVID-19 pandemic while the secondary appraisal is measured using the anxiety response to the stress. These factors are quantitatively measures using the Likert scale and help in the statistical analysis of the psychological impact of the COVID-19 pandemic on the public.

Researchers have tried to study COVID-19 impact on the economy of a country or industries such as tourism or COVID-19 impact on resources and several such resources are available to us (Fernandes, 2020; McKibbin and Fernando, 2020; Hoque et al., 2020; Abu Bakar and Rosbi, 2020; Folinas and Metaxas, 2020; Jamal and Budke, 2020; Ying et al., 2020). However, fewer research on the psychological well-being or explicit investigation of mental health-related crises among people in the wake of the COVID-19 pandemic especially in a tourist destination setting is available. Based on the economic importance of tourism in Penang Island, a study evaluating the psychological well-being among residents and its impact on tourism is proposed in this study.
1.1 Coronavirus and its impact on Penang Island

COVID-19 was discovered when a group of about 40 cases of unknown etiology was reported in China. It was soon established to be a new virus and was named Novel Coronavirus. Shortly after it was discovered, the first death occurred (World Health Organization, 2020) and the number of people infected from COVID-19 started to increase. Within just a few weeks, the virus spread over the globe (Culp, 2020). Soon the WHO declared it a pandemic disease COVID-19 (WHO, 2020). It was observed that the COVID-19 could be transferred to the large human population and can cause severe respiratory illnesses. As this virus was posing a global threat, countries all over the world deployed a lockdown state, educational institutions shut down, offices closed, social distancing was a must, traveling was banned and home quarantine was in effect because of COVID-19.

The COVID-19 direct threat to health was one of the major risks associated with traveling or living in a famous tourist destination. The health risk is an essential factor that impacts the people’s choice of going to or living in a famous tourist destination (Lehto et al., 2007). The risk of being infected by a virus such as COVID-19 has not only impacted the tourist destinations negatively but people residing in tourist destinations are also suffering. Studies have identified that when the risk of being infected is high, the intention to travel is low (Tsai et al., 2016; Stylidis et al., 2014). Scholars have notified that the risk perception of the people, whether they are local or international significantly influences their intention to travel (Gibson and Yiannakis, 2002; Roehl and Fesenmaier, 1992). COVID-19 has increased the level of health-related threat, making it a safety issue for people all over the world. Baud et al. (2020) state that often the mortality statistics are underestimated, whereas the real statistical figure is higher. Additionally, as COVID-19 is a novel disease with a faster transmission rate; the health risk is significantly higher. It has created anxiety and fear among people all over the world. Tourism activities are halted because traveling is expected to facilitate the spreading of the virus (Mason et al., 2005). Travel restrictions and the movement control order (MCO) implemented to control the spread of COVID-19 globally have severely impacted the tourist destinations and the people residing in them (Peters, 2020).

COVID-19 continuous morbidity and mortality rate has impacted the public all over the world. The lockdown and travel restrictions implemented in Malaysia to curb COVID-19 infections are in effect at this point of time which is the end of April 2020. Similar to the rest of the world, people residing in Malaysia also have to abide MCO and follow self-quarantine, maintain social distance, observe enhanced hygiene practices and avoid traveling. Immediately after MCO was declared a shortage of goods was observed due to the mass panic among the citizens (Khan et al., 2020). Moreover, rumors and myths on social media also spread quickly, worsening the situation. Governments and the WHO urged the public across the globe to first test the authenticity of these posts to avoid generating any type of panic or stress. Unruly behavior among the few sections of the public also has been a cause of concern for the authorities. Using all the social media platforms available, the government, health-care professionals, as well as celebrities appealed to the public to avoid social gatherings such as family functions, religious ceremonies and public meetups and observe social distancing (McCloskey et al., 2020).

As mentioned earlier, the health-related issues (psychological or serological) generated because of COVID-19, impacts the destination adversely. Penang Island, which is one of the most visited tourist destinations in the world, is similarly affected by COVID-19. The island boasts several cultural heritage sites, nature and adventure tourism and oriental cuisine. Destinations, namely, Penang Hill, Penang National Park, Batu Ferringhi, Georgetown, Tanjung Bungah, Teluk Bahang and Balik Pulau, are few such tourist attractions among many. UNESCO biosphere reserves present in Penang Island is also one of the major cause attractions for the people toward Penang Island. COVID-19 has brought a stop to all tourist activities in Penang Island. Penang shared almost 12% of the foreign
1. Introduction

Travelers before COVID-19 in Malaysia. In 2019, 2,920,160 travelers visited Penang, of which 1,452,096 were foreign travelers while 1,468,064 were local travelers. With MCO in place, tourism activities at these locations have shut down. All the tourism-related services such as air travel, tours, events, cruises, hotels, restaurants and retails came to a cease point because of COVID-19 (Penang Institute, 2020). This has resulted in higher stress and discomfort among frequent travelers.

Residents of Penang Island now face a tough situation due to the pandemic. The restrictions imposed have put a screeching halt to the daily life of the citizens. The anxiety and stress generated influenced the varying attitude among the public. Many flouted the social distancing protocol, which compelled the government to deploy armed forces to support the local police in setting up roadblocks. The latest research evidence observed that people in quarantine, are prone to elevated stress which manifests in different forms such as anxiety, anger, stress and confusion (Brooks et al., 2020). The awareness among the people influences their attitude, as observed in their level of obedience of the government-issued protocols and their acceptance or rejection of the situation. Attitude and its translated behavior is the key toward understanding its impact on mental health especially during a challenging situation such as a pandemic. The aforementioned factors such as attitude, anxiety and awareness are vital to understand the psychological needs of the community in Malaysia especially in a bustling tourist destination such as Penang Island now desolate as COVID-19 pandemic.

2. Methodology

2.1 Design

A cross-sectional study design was selected by following the guidelines of Strengthening the Reporting of Observational Studies in Epidemiology (Vandenbroucke et al., 2007). The non-probability snowball sampling technique was used because Shaghaghi et al. (2011) stated that snowball sampling could help to get answers from participants who are hard to reach and currently because of MCO and social distancing rules implemented in the country, reaching participants was difficult.

2.2 Participants and data collection

The study was carried out in Penang Island, Malaysia. The questionnaire was sent to the respondents using WhatsApp, emails and other social media tools that were found useful by the researchers. People residing in Penang Island during the COVID-19 pandemic were the participants of the study. The eligibility criteria for respondents was set such that the participants were 16 years and can understand English. The participants were urged to forward the survey to as many people as possible. After accepting, the respondents were moved toward the info section, which indicated information about the survey and notified about the agreement. Before data collection, a sample of the above 385 respondents was recommended based on the guidelines given by Price et al. (2005), which should give an acceptable 95% confidence interval for this study. The data collection started on April 23, 2020, and was closed on April 28, 2020. A total of 386 responses were received.

2.3 Measurement

A semi-structured questionnaire was adopted from Roy et al. (2020) and was made online with the help of google forms. Socio-demographic variables of this study comprising demographic variables such as age, gender, occupation, education, area of residence and religion. The survey was segmented into fields related to awareness, attitudes, anxiety and perceived mental health care needs during the COVID-19. Likert scale was used to measure the attitudes and behavior of the respondents ranging from 1 to 5; where 1 = never, 2 = occasionally, 3 = sometimes, 4 = often and 5 = always.
2.4 Analysis
To analyze the findings of the study, descriptive statistics have been used, and to measure the results of this research mean, standard deviation and variability were calculated using SPSS (version 24). The relationship of variables was tested using Pearson’s Correlation test. ANOVA analysis was performed where a $p$-value of less than 0.01 was considered to be statistically significant for this study.

3. Results
An online questionnaire related to attitude, fear experienced and mental health care perception of the people residing in Penang Island during the COVID-19 was conducted. All the participants were above 16 years of age. This study included those participants who were able to understand English and also had access to the internet. The minimum education level that was observed in this study was the diploma level. The highest qualification of the participants was observed to be a doctorate degree and were professionals from various fields. The majority of the respondents were from 31–40 years of age. Among the participants 53.6% were women and 46.1 were men. All the participants were residing in Penang Island during the COVID-19 pandemic. Statistical analysis of the data obtained was performed using the software SPSS (version 24) to estimate the mean, standard deviation and variability. Figure 1 illustrates the questionnaire items used to measure the general public awareness regarding the disease, their attitude and the anxiety induced by this stressful environment of the pandemic.

3.1 Coronavirus awareness
Awareness regarding the pandemic COVID-19 was assessed using the survey questionnaire. Four items were used in this survey to assess residents’ awareness about the pandemic. The majority of the participants concur on; the possible routes of transmission of the COVID-19 virus, the highly contagious nature of the virus and the fact that there is no treatment for the disease. The majority of the respondents agree that self-quarantine and frequent washing of hands (AW1) would help minimize the chances of viral transmission. Isolation of those exhibiting symptoms to stop the spread of infection (AW2) was agreed
upon by 96.6% of the respondents. In addition, the majority believe that social distancing is essential to stop the viral spread (AW4). The possibility that pets could transmit the virus to people (AW3) was rejected by 67.9% of the participants. Moreover, all the participants were aware about the commonly indicated symptoms of this infection.

3.2 Attitude of people toward coronavirus

The data collected from the survey was used to analyze the attitude of participating residents of Penang Island. The data was collected on five-point Likert scale ranging from 1 to 5; where 1 = never, 2 = occasionally, 3 = sometimes, 4 = often and 5 = always. The majority of the respondents unanimously agree that they will quarantine themselves if they show symptoms of COVID-19 such as fever, sore throat, flu or cough. More than 90% of the participants avoid partying (AT3) following the social distancing protocol. In-line with this thought process, a greater percentage of respondents even avoided ordering food online (AT4). Additionally, almost 85% of people think that traveling in this period is not safe (AT1).

3.3 Anxiety faced during coronavirus

The anxiety levels encountered were measured based on their influence on the residents of Penang Island. Data from the survey indicated that almost half the respondents felt paranoid about contracting the COVID-19 virus (AX1). In total, 75% of the participants had difficulty sleeping (AX2) due to the COVID-19 pandemic. Respondents stated that they discussed about the pandemic posts with friends, excluding the 5.7% of the respondents. Hoarding of stock (AX3) was deemed important by 38% of the participants. While 54% felt afraid due to the reports of positive cases nearby and still more than 50% felt panic due to the COVID-19 reports. Respondents also were constantly worried about themselves and their loved ones getting infected during this period (AX5). In total, 37% of participants felt the need to use gloves and sanitizer all the time as the start of the pandemic even when they did not experience any symptoms. Also, many of the participants agreed that they constantly washed hands (AX4) and used masks constantly (AX6).

3.4 Mental health of residents in Penang Island

Four constructs were used to analyze the awareness of the general public regarding the preventive control measures against COVID-19 infection. Four constructs measured the general public attitude toward the pandemic and six constructs measured the mental health of Penang Island residents who participated in this study (Figure 1). As shown in Table 1, the mean score for each of the constructs used to measure the variables; awareness, attitude and anxiety. The correlation coefficients for each of the selected variables were calculated using SPSS (v24), displayed in Table 1. A statistically significant correlation between awareness and attitude was estimated at 0.544 ($p < 0.01$). It was also found that the attitude of the public had a significant correlation with anxiety ($r = 0.640$, $p < 0.01$).

Analysis of the mental health of participants belonging to different demographic groups are displayed in Table 2. The results from ANOVA analysis indicate that age [$F (386) = 9.55$, $p < 0.05$] differs significantly in the anxiety level estimation. It was also observed that

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Mean, standard deviation and correlation of between variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Awareness</td>
<td>4.06</td>
</tr>
<tr>
<td>Attitude</td>
<td>3.12</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4.10</td>
</tr>
</tbody>
</table>

**Note:** **Correlation is significant at the 0.01 level (two-tailed)**
anxiety levels in >45 years old participants were lower compared to participants between ages 31 and 45, as well as those younger than 30. Comparison of the mean values for mental health estimation with respect to gender showed that gender \( [F (386) = 12.79, p < 0.05] \) of the participants also matters significantly. Here, anxiety levels were estimated to be relatively higher in female as compared to male participants.

### 3.5 Mental health care needs of the residents during coronavirus

As observed in Figure 2, 90.7% of the participants agree to the need for psychological help during this pandemic. In total, 93% of the participants believe that it would be nice to talk to someone during these pandemic times and that it is beneficial to get professional help if a person

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Demographic variation in awareness, attitude and anxiety measurements (here, ( n = 386 ))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Anxiety Mean ± S.D.</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.99 ± 0.74</td>
</tr>
<tr>
<td>Female</td>
<td>4.20 ± 0.60</td>
</tr>
<tr>
<td>Total</td>
<td>4.10 ± 0.67</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>16–20</td>
<td>3.04 ± 0.58</td>
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<tr>
<td>21–25</td>
<td>3.29 ± 0.80</td>
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<tr>
<td>26–30</td>
<td>3.81 ± 0.80</td>
</tr>
<tr>
<td>31–35</td>
<td>4.20 ± 0.60</td>
</tr>
<tr>
<td>36–40</td>
<td>4.33 ± 0.43</td>
</tr>
<tr>
<td>41–45</td>
<td>4.16 ± 0.54</td>
</tr>
<tr>
<td>46–50</td>
<td>3.69 ± 1.03</td>
</tr>
<tr>
<td>51–55</td>
<td>3.50 ± 0.0</td>
</tr>
<tr>
<td>56–60</td>
<td>2.67 ± 0.0</td>
</tr>
<tr>
<td>61–65</td>
<td>2.75 ± 0.59</td>
</tr>
<tr>
<td>Total</td>
<td>4.10 ± 0.67</td>
</tr>
</tbody>
</table>

Note: * t(F) score is significant at \( p\text{-value} < 0.05 \)

Figure 2: Psychological health of residents
experiences panic due to this pandemic. A majority (92%) of the respondents stated that it would be beneficial if mental health professionals help people in this challenging time and would suggest professional help to the people who are most affected by the COVID-19 pandemic.

4. Discussion

There have been several pandemics of historic proportions in the world. The daily lives of the people residing in the afflicted areas are severely affected where they face challenges in performing simple everyday tasks such as grocery shopping or simple commute to work. Lack of awareness is considered to be a significant factor that leads to unworried attitudes which makes it more difficult to control a pandemic disease. These pandemics have an intense impact on the mental health of the people and create anxiety related to the pandemic and also influence the behavior of the people. So, this study sought to understand the different socio-cognitive factors such as awareness, attitudes, anxiety and mental health care perception during the COVID-19 pandemic. The quantitative measurements of attitude and anxiety used in this study successfully follow the cognitive appraisal theory postulated by Folkman and Lazarus (1985). The attitude measurement represents the primary appraisal of the stress, while the anxiety measurement represents the secondary appraisal of the stress-induced by the COVID-19 pandemic.

It was found after the survey that most of the people present in Penang Island during COVID-19 were aware of the situation and well-educated as well. They had good information about the symptoms and awareness regarding the preventive measure was also adequate. People are keeping themselves updated with the news regarding the COVID-19 pandemic. The participants of the study also reported that they were using hand wash, sanitizers and masks, which shows that the people were concerned about hygiene and wanted to protect themselves from COVID-19 infection. The attitudes of the people present in Penang Island also showed their awareness as they were keeping social distance and avoiding any type of public gatherings.

Based on the variance values, the responses to public attitude toward hygiene, self-quarantine and social distancing were statistically estimated to be consistent within the population. However, the responses with respect to their attitude toward travel indicated significant variability. This could indicate that the purpose of travel along with the obedience of precautionary measures could be potential factors considered by some of the respondents. The majority of the respondents think that travel during a pandemic is unsafe. This hesitation toward domestic travel could be interpreted as a direct impact on tourism. Several scenic locations within Penang Island, such as Penang Hill, Penang National Park and Batu Ferringhi are popular among both international, as well as local tourists and are economically important travel destinations. Public attitude to avoid traveling to these locations indicates their disposition to avoid crowds and general interaction with other people caused by the fear of infection. With the COVID-19 pandemic, the change in public attitude has directly affected the tourism and trade in these areas resulting in a temporary shutdown. Local tourists who could be considered as a pathway to recovery for tourism in Penang Island avoid going to any tourist destination. Extension of the MCO imposed by the Malaysian Government has increased the shutdown period for tourism or any other activity in the area. People living in Penang Island are becoming restless and their anxiety is increasing as the MCO extends. Even after the MCO has been lifted restoration of the tourism industry from COVID-19 pandemic induced recession, market instability and the shutdown would be gradual. Discounted tour packages or shopping rebates could be considered to change tourists’ behavior for traveling. Major corporations such as Penang Hill Corporations which house several subsidized tourism stakeholders could recover relatively easily as compared to small local businesses that thrive on tourism. These small businesses are tourism hotspots known for specifically their cultural significance, and hence proper measures for the revival of this sector is necessary. A survey on domestic travel in
Malaysia after MCO was conducted by the strategic planning division of Malaysian tourism reported that the majority of the respondents believe that pandemic has impacted the general public attitude toward traveling. Prioritizing hygiene, low confidence toward public transportation, unwillingness to travel in crowded areas were also reported as the reasons behind this change in attitude. The interpretations in this study conform with the observations reported. The cultural diversity and bio-diverse geographic location grant the title of tourism destination to Malaysia. Penang, also popularly known as the pearl-of-the-orient draws its economic significance based on tourism activities. The importance of this study lies in providing a relevant measure of the residents’ attitude during the pandemic which has been shown to influence their outlook toward tourism.

Anxiety is one of the major indicators of stress which could be internalized or expressed. The survey questionnaire in this study estimates the anxiety levels among the respondents. The public obedience of the MCO indicated their readiness and effort in reducing COVID-19 infections. However, the fear motivation behind this compliance is highlighted when asked whether the people who have recovered from COVID-19 should be allowed to stay within the community or not. Almost 40% of the population gave no and maybe answers. Anxiety and panic among the residents were observed to be increasing because of the COVID-19 because a large population of the respondents stated to buy in bulk quantity which can result in exhaustion of the supplies. It is because of stress-induced anxiety people to observe to adopt to different undesired lifestyles and dietary habits. In addition to making people gullible to rumors, anxiety has an impact on the mental health of patients. Mental well-being is an important part of the overall health of an individual and anxiety can hamper mental health resulting in several issues such as sleep, headaches, unwanted routines and much more. In this study, more than 50% of people reported having experienced sleeping disorders as a result of COVID-19 induced stress. People also tend to get affected by the posts present on social media and news which indicates that even though the majority of the participants have a good awareness of the COVID-19 pandemic yet they are still influenced by the social media platforms and information presented in the news.

Anxiety-based stress estimation used in this study thus showed that the respondents were undergoing a significant amount of stress. The respondents in this study belonged to various professions which were affected by the pandemic. The stress caused due to the COVID-19 pandemic among these professionals was statistically estimated to be quite high. Considering the importance of the tourism industry to the Malaysian economy, the shutdown of this sector has significantly hampered the country’s gross domestic product during this period. Extrapolating the data from respondents in this study to the professionals from the tourism industry anticipates higher stress levels. Especially the small businesses that earn their livelihood solely from tourism are a target for higher psychological stress which could express into sleeping disorders, panic and paranoia triggered by the pandemic related news and social media posts.

In terms of coping mechanisms to dissipate the stress caused by this pandemic, the survey proposes mental health care to affected individuals. The analysis of data obtained from the respondents showed agreement to the proposal. The respondents believe that communication is key for de-stressing and this is indicated by their responses to the survey. The respondents affected by the social media posts opted to cope by talking about their worries related to COVID-19 with someone. Thus, giving them the opportunity to de-stress during the lockdown. The majority of the respondents think that the rising number of infections in their nearby localities and the stress resulting from that could be relieved by seeking help from trained mental health practitioners. This practice will help them in proper understanding the stress and benefit from the professional guidance regarding healthy coping mechanisms. Though none among the respondents were infected, they believed that mental health care support is necessary during a pandemic. Considering that the
research about the disease and the COVID-19 virus is still ongoing, the people who tested positive for COVID-19 would experience elevated stress levels as compared to the uninfected people. This belief is shared by the respondents who recommend therapeutic help to those infected with COVID-19. Therapy sessions would allow the patients to cope with the disease in a healthy manner and ease their treatment process. The economic setback is one of the major causes of anxiety and depression. The professions that experienced a total shutdown as a result of the pandemic thus are more prone to this stress. Mental health care outreach for those affected could help with the coping process, as well as provide motivation to seek economic backup.

5. Conclusion

During the COVID-19 pandemic, it was observed that the majority of the people present in Penang Island were aware of the infection and had the knowledge to how to prevent from being infected by COVID-19. Social distancing, avoiding travel, taking preventive measures and government initiatives were readily followed by the public and thus seem to be good measures to limit the spread of COVID-19. Still, worries among the residents are increasing regarding the COVID-19 virus. The two main contributing factors of the rising stress level could be the fear of contracting the disease and the secondly the negative impact of the MCO on their income. This study estimates that the general public is prone to anxiety and sleeping disorders as a result of the stress-induced by the COVID-19 pandemic. The study conforms with the cognitive appraisal theory proposed by Folkman and Lazarus (1984). This study proposes the significance of mental health care in alleviating the stress caused by the pandemic COVID-19. The positive public perception regarding the significance of seeking professional help to cope with mental stress and ensure overall well-being is reinforced in this study. It is vital to plan effective mental health care strategies so that people pass through the COVID-19 phase with ease and with good health. The respondents of this study come from a varied professional background. The local residents of the area who are also the local tourists, need psychological assurance and guidance to start traveling again. If rules such as social distancing, hand sanitizing and other safety measures are taken after MCO, then the residents of the area can feel at ease and safe while coming out after MCO in Penang Island and visiting the beautiful destinations of the area without being infected by the COVID-19 disease.

6. Implications

The results of this study highlight the need to ensure psychological health services in Penang Island when strict self-isolation and quarantine policies are implemented. Academicians working on tourism cities can benefit from the insights of this study to find how COVID-19 impacts the tourism destination and people residing in that destination. People residing in a tourist destination have a different mindset than people living in non-tourist destinations. They are comfortable with the bustle of the tourist crowd and also partake in tourist activities taking place in the area. For the majority of people living in a tourist destination, tourism activities are their source of income. A halt in these activities with the implementation of the MCO rules directly affected their livelihood and thus had a strong psychological impact. The swift increase in the anxiety and depression of the people because of the uncertainty of the disease are coupled with vital, however, socially disruptive measures such as social distancing, lockdown and isolations. Efficient control of the flow of information by governing authorities will help curb spread of panic inducing misinformation and reduce the anxiety level among the public. Respondents in this study supported the need for professional psychological assistance thus mental health services could be altered to best suit the requirements of the population. Information helpline and service hotline providing health-care support counseling could aid in reducing anxiety. Staying cooped up indoors for a prolonged period has shown to increase stress thus encouraging the public to
engage in individual activities, use of technology for social interaction could help enhance the public’s sense of control of the current situation and reduce the anxiety caused because of restrictions. Voluntary Community Help Groups should be established to guide people in reducing stress and anxiety. With frequent reminders about the safety measures and obedience of proper guidelines, the residents could be given assurance of safety and permission to move around in the destination, which, as a result, could help Penang Island resume its local tourist activities gradually.

8. Limitations

This study was limited to the people who had access to the internet and had the ability to read and write English. Thus, the study was limited to an educated population and people present in Penang Island only. An updated study incorporating the uneducated population, plus people from all over the country would give a wholesome overview of the psychological impact of COVID-19 induced stress on residents.

References


Further reading

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