

## Covid-19 and Traveling Intention: A Risk Perception

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### Abstract

*The new virus outbreak namely SARS-Cov-2 was first discovered in Wuhan, China, and became a pandemic because it spread rapidly to various countries in 2020. The Covid-19 pandemic has an impact on various community activities, such as traveling. The purpose of this research is to find out public knowledge about Covid-19 risks and the effect of the Covid-19 pandemic on their travel plans. The survey was conducted by asking questions about travel plans and learning about the Covid-19 pandemic. The survey was collected using a google form, which was distributed through various social media with a sample of 570 respondents spread from different regions in Indonesia. The survey results show that the majority of respondents have known about the Covid-19 outbreak since December 2019, know the countries affected, and know the characteristics of people infected with Covid-19. As many as 67.4% of respondents stated that they had plans to travel in 2020, but the majority of them decided to postpone or cancel their travel plans. Respondents strongly agree that Covid-19 is highly contagious, deadly, and consider traveling during a pandemic very risky. However, respondents strongly believe that the Covid-19 pandemic will end soon in 2020. The results of this survey prove that health risks are a crucial factor for people in making travel decisions.*

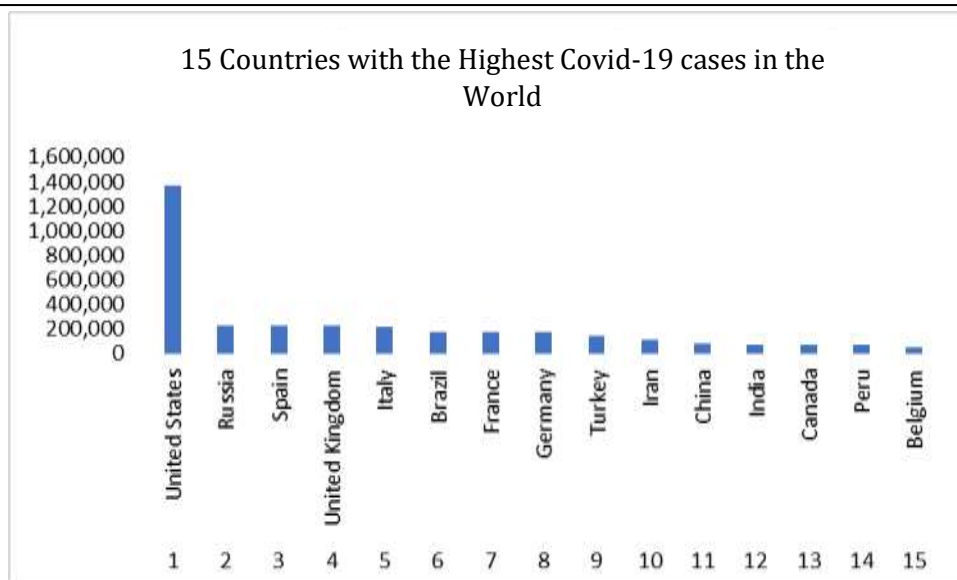
### Keywords

Covid-19; traveling behavior; tourism; Indonesia



## I. Introduction

Starting in Wuhan City, Hubei Province, China, a pathogen that causes respiratory problems has infected several people and caused death. The pathogen was then called the new coronavirus SARS-Cov-2, which causes Covid-19 disease. This virus epidemic then spread rapidly, and the World Health Organization (WHO) set Covid-19 to be a pandemic since 11 March, 2020. Since it was discovered in December 2019, the first country outside China to confirm a Covid-19 case was Thailand, followed by Japan and continues. Spread to many countries in Asia, Europe, Africa, and even the United States. As of 13 May 2020, the United States of America became the country with the highest number of Covid-19 cases in the world, followed by Russia, Spain, Britain, and Italy. The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).The following chart depicts the fifteen countries with the highest number of Covid-19 cases in the world:



Source: Statistita, 2020

**Figure 1.** Top 15 Countries with the Highest Cases in the world (data as of 13 May 2020)

Although the first outbreak of cases has not been confirmed, it is believed that the outbreaks originated from animals sold at the Wuhan City animal market. A person can get Covid-19 from another person who has this virus. The outbreak of Covid-19 occurs easily between humans through droplets from the nose or mouth directly hitting someone. Apart from now, a person can also contract Covid-19 indirectly, namely if he touches objects or surfaces that are splashed with the nose or mouth of an infected person, then he touches his eyes, nose or mouth (WHO, 2020 [https:// www.who.int/indonesia/news/novel-coronavirus/qa-for-public](https://www.who.int/indonesia/news/novel-coronavirus/qa-for-public)). Even the virus that causes Covid-19 can last a long time on inanimate objects for days, so preventive efforts are highly recommended to minimize the risk of contracting Covid-19, such as wearing masks and washing hands.

A person infected with Covid-19 has symptoms such as fever, cough, and breathing problems. In severe cases, Covid-19 can cause pneumonia and heart failure, which can lead to death. With an average death rate in the world of 6.87%, Covid-19 is a severe concern for all countries. The following are data from fifteen countries with the highest death rates due to Covid-19 in the world (data as of 13 May, 2020).

**Table 1.** Top 15 Countries with the Highest Average Death Rate from Covid-19

No	Country	Death Rate (%)	No	Countries	Death Rate (%)
1	Belgium	16.29	9	Mexico	10.24
2	France	15.29	10	Algeria	8.49
3	United Kingdom	14.44	11	Ecuador	7.65
4	Italy	13.97	12	Canada	7.32
5	Hungary	12.87	13	Brazil	6.99
6	Netherlands	12.82	14	Slovenia	6.98
7	Sweden	12.15	15	Indonesia	6.83
8	Spain	11.81			

Source: Statistita (May, 13<sup>th</sup> 2020)

Belgium is the country with the highest death rate due to Covid-19 in the world at 16.29%. They were followed by France, England, and Italy, respectively. Meanwhile, Indonesia, although the number of cases as of 13 May 2020, was less than 15,000 cases, the death rate due to Covid-19 is relatively high and ranks fifteen countries with the highest death rate in the world.

The spread of Covid-19 was much faster than the SARS virus in 2002 and 2003 (Wilder-Smith, et al, 2020). Also, Covid-19 quickly spreads in the community even though they do not know each other even during trips such as on planes, ships, buses, trains, and others. Inflammation is very fast and easy and causes death to make people worried about doing activities that are related to other people. Some countries tend to be unprepared for the Covid-19 outbreak, so they are vulnerable to this outbreak (Whitworth, 2020). Social distancing (maintaining social distancing) and Physical Distancing (maintaining physical distance) are alternatives for society to reduce the risk of being exposed to the coronavirus. Several countries canceled various activities and meetings, sport events, and even closed public places such as schools and campuses.

As of December 2019, China is the world's third-largest aviation market after the United States and the United Kingdom. However, four weeks after that, since the Covid-19 outbreak in January 2020, China's ranking has dropped to 25th below Portugal (Mhalla, 2020). Covid-19 has had a significant impact on flight operations, especially on the demand and supply of global flights. Some flights were canceled either due to airline decisions or as a result of airport closures. The number of weekly international passenger seats operating from China has decreased significantly from 20 January to 10 February 2020 (Mhalla, 2020). The decline in passengers from China did not only occur on flights to countries such as Japan, South Korea, and Thailand. Significant decreases also occurred in passenger capacity from China to Indonesia (-92%), Singapore (-59%), and the United States (-86%). Body temperature checks are commonly carried out in various places, especially public places, to detect whether a person has a fever or not because fever is one of the symptoms of a person contracting the SARS Cov-2 virus.

The number of passengers to and from Hong Kong is seasonal, with the busiest seasons being April (Easter), July and August (summer holiday), October (China's Golden Week), and December (Christmas). The SARS outbreak of 2003 had an impact on international Hong Kong aviation, namely a decrease in the number of passengers by 16.7% in March 2003, 70.9% in April, 81.1% in May, 62% in June, and 25.9% in July 2003. Hong Kong Airport is one of the busiest airports in the world. The airport has handled more than 70 million passengers per year since 2016. Hong Kong's economy was hit hard, and many SMEs were forced to go bankrupt due to a lack of cash flow (Dombey 2004 in W. M To, 2020). This outbreak disrupted the flow of goods and services, supply chains, trade, finance and banking, travel business, capital, labor, business, and production. In a pandemic condition, consumers panic and affect demand shock. Also, it is believed to have occurred during the Covid-19 pandemic, and the impact may have been more significant due to the increasingly dense travel flow and trade traffic.

To slow the spread of the Covid-19 virus, the government has implemented travel restrictions, quarantine, and closure of regional borders. Several countries have implemented a lockdown or a ban on entry to their countries to reduce the spread of Covid-19 (CEPR, 2020). In Indonesia itself, the government urges people to work from home, study from home, and pray at home to reduce the rate of the SARS-Cov2 virus outbreak.

The government continues to release developments in the number of Covid-19 cases every day. A pandemic that has not ended until the arrival of the month of Ramadan can change the homecoming tradition that people usually do to welcome Eid. Homecoming is

an activity commonly found in Indonesia where people travel to their hometowns of origin during the Eid al-Fitr season. During the Covid-19 pandemic in 2020, the Indonesian government officially prohibited the public from going home and on 21 April 2020 and restricted commercial aircraft flight activities only for business and urgent needs. The government action aimed at reducing the rate of transmission of Covid-19 to various homecoming destinations that have the potential to form new epicenters.

## **II. Review of Literature**

### **2.1 Travelling and Outbreak**

Several factors contribute to the spread of infectious diseases in the world, including the increasing reach of human mobility, the increase in trade and tourism volume. Human travel and migration (especially via air travel) are currently the main driving factors accelerating transmission. Year after year, there is an increasing number of international tourists, refugees, and international migrants, a large capacity for shipping by sea, and a growing volume of international passengers by air. (Findlater & Bogoch, 2018).

Air travel has contributed to several epidemics in the world in recent years. The infected individual, both during the symptom period and in the incubation period, flies to a remote location and infects the local community. The SARS virus that originated in southern China spread through air travel to 29 countries in 2002-2003. The MERS-CoV virus which originated in Saudi Arabia in 2012 also spreads via air travel and spreads to 27 countries. South Korea has become the largest infected country outside Saudi Arabia due to business travelers arriving from Saudi Arabia. Meanwhile, the Ebola virus (EVD) first appeared in West Africa in 2014. The Ebola epidemic spread by road travel to the border of Guinea and Liberia. From these places, cases began to appear on several continents through international air travel. Greater human mobility, driven by air travel, increases the frequency and reach of infectious disease epidemics. Air travel can quickly connect two points on planet Earth and have the potential to cause the rate and spread of infectious diseases that threaten global health safety (Findlater & Bogoch, 2018).

The impact of the Covid-19 outbreak is thought to be greater than the SARS epidemic in 2003 due to two factors (ICAO in Mhalla, 2020). First, international traffic to and from China has more than doubled since 2003, while domestic traffic has increased fivefold in the same period. The second factor is the large drop in air capacity to and from China since 70 airlines have suspended their international flights while another 50 have reduced their flights. In fact, prior to the Covid-19 outbreak, airlines had programmed to increase capacity to and from China in the first quarter of 2020. This outbreak of course affected airline cash flow and profits, burdening airlines and potentially losing revenue.

### **2.2 Traveler's Risk Perception**

In 2009, the H1N1 influenza virus pandemic had an impact on decreasing travel in the world (Leggat, Brown, Aitken and Speare 2010 in Cahyanto et al., 2016). Several studies have consistently found that pandemics have an impact on international travel (Cahyanto, et al., 2016). Leggat and Klein (in Cahyanto, et al., 2016) found that more than half of Queensland travelers expressed concern about the H1N1 pandemic and the majority postponed their travel. Meanwhile, Lee et al., (2012) found that the perception of H1N1 was not a significant determinant of interest in traveling. Meanwhile, Reisinger and Mavondo (2005 in Cahyanto et al, 2016) found that the perception of a disease is an important indicator that changes travel patterns.

Using GPS location data and Covid-19 cases as well as population characteristics in the United States, Engle, et al., (2020) found that an increase in transmission rates from 0% to 0.003% reduced community mobility by 2.31% and government restrictions to "stay at home" reduced mobility by 7.87%. This suggests that people may reduce their mobility due to their perceived risk of being exposed to Covid-19 if their mobility is high. In addition, research by Engle, et al., (2020) shows that the government's appeal not to do activities outside the home is proven to reduce the mobility of people in the United States.

### III. Research Method

This research is based on a survey of people in Indonesia regarding their attitudes towards travel decisions amid the Covid-19 pandemic. The data in this study were collected using google form which is distributed through various social media. The survey begins with questions about the demographics of respondents, public knowledge about Covid-19 and the relationship between the Covid-19 pandemic and the risk of traveling. Respondents' responses consisted of a Gult scale (Yes / No) and a 5 Likert scale (Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree).

### IV. Result and Discussion

The survey was conducted online using google form and distributed through various social media to the Indonesian people for approximately two months. A total of 612 responses from respondents from various regions have been collected, but not all respondents' responses can be used because not all respondents completed their answers or did not answer complete demographics. So that the sample that can be used in this survey is 570 respondents. Characteristics of respondents based on gender, generation (age), education, marital status, income and occupation can be seen in the following table:

**Table 2.** Characteristics of Respondents

Category	Gender		Total
	Male	Female	
	n = 232	n = 338	N = 570
<b>Age</b>			
Gen Z (born between 1995 - 2020)	104 (44.8%)	201 (59.5%)	305 (53.5%)
Gen Y/Millennial (born between 1980 - 1994)	99 (42.7%)	111 (32.8%)	210 (36.8%)
Gen X (born between 1965 - 1979)	21 (9.1%)	21 (6.2%)	42 (7.4%)
baby boomers (born between 1946 - 1964)	8 (3.4%)	5 (1.5%)	13 (2.3%)
<b>Education</b>			
Highschool/equivalent	84 (36.2%)	120 (35.5%)	204 (35.8%)
Bachelor/Diploma	104 (44.8%)	158 (46.7%)	262 (46%)
Postgraduate	44 (19%)	60 (17.8%)	104 (18.2%)
<b>Marital status</b>			
Single	124 (53.4%)	210 (62.1%)	334 (58.6%)
Married, Have No Children	18 (7.8%)	22 (6.5%)	40 (7%)
Married, Have Children	90 (38.8%)	106 (31.4%)	196 (34.4%)

<b>Income</b>			
Less than 2.500.000	66 (28.4%)	168 (49.7%)	234 (41.1%)
2.500.000 - 5.000.000	79 (34.1%)	109 (32.2%)	188 (33%)
5.000.001 - 7.500.000	39 (16.8%)	30 (8.9%)	69 (12.1%)
7.500.001 - 10.000.000	24 (10.3%)	8 (2.4%)	32 (5.6%)
More than 10.000.0000	24 (10.3%)	23 (6.8%)	47 (8.2%)
<b>Occupation</b>			
Private employee	104 (44.8%)	115 (34%)	219 (38.4%)
Civil Servants/Military/Police	40 (17.2%)	34 (10.1%)	74 (13%)
BUMN/BUMD employees	13 (5.6%)	8 (2.4%)	21 (3.7%)
Professional	4 (1.7%)	12 (3.6%)	16 (2.8%)
Entrepreneur	38 (16.4%)	50 (14.8%)	88 (15.4%)
Student/Varsity Student	18 (7.8%)	63 (18.6%)	81 (14.2%)
Others	15 (6.5%)	56 (16.6%)	71 (12.5%)
<b>Have a Budget for Traveling</b>			
Yes	132 (56.9%)	177 (52.3%)	309 (54.2%)
No	100 (43.1%)	161 (47.7%)	261 (45.8%)

Based on table 2 above, it can be seen that the majority of respondents are female, namely as many as 338 people (59.3%) and the majority are generation Z or respondents born on or after 1995, followed by respondents from generation Y or better known as the millennial generation who were born between 1980-1994. The majority of respondents have a Bachelor / Diploma degree, while from marital status, the majority of respondents are not married and the largest income range is in the income range of less than Rp. 2,500,000, followed by a range of Rp. 2,500,000 - Rp. 5,000,000. The majority of respondents are private employees, which is 38.4%. Of the 570 respondents, as many as 309 respondents (54.2%) turned out to have budget funds for traveling while the rest (45.8%) did not have the budget for traveling.

Covid-19 started in Hubei Province in China in December 2019 and has continued to spread to various countries since early 2020. Indonesia itself confirmed the first case of Covid-19 on March 2, 2020. Socialization about the characteristics of people infected with Covid-19 and its prevention continues carried out by the government in order to suppress the Covid-19 case in Indonesia. The following table shows the knowledge of the Indonesian public regarding cases of the emergence of Covid-19, the characteristics of the infected people, the countries affected and their travel plans:

**Table 3.** Knowledge about Covid-19

Knowledge about Covid-19	Yes	No
Knowing Covid-19 Since 2019	506 (88.8%)	64 (11.2%)
Knowing the characteristics of people infected with Covid-19	388 (68.1%)	182 (31.9%)
Knowing the Countries Affected by Covid-19	540 (94.7%)	30 (5.3%)
Have a 2020 Travel Plan	384 (67.4%)	186 (32.6%)

*Source: Author compiled*

Table 3 shows that the majority of respondents (88.8%) have known about Covid-19 since 2019. This is supported by the massive amount of information from various media, from mass media to social media. Not only because of the rapid spread and the risk of death caused by it, Covid-19 is of global concern as well because it comes from a country with high mobility. From table 3 it can also be seen that the majority of respondents (68.1%) know the characteristics of people infected with Covid-19. The characteristics of people infected with Covid-19 are socialized by the World Health Organization (WHO) and the Ministry of Health of the Republic of Indonesia. Fever and cough are the most visible characteristics of people infected with Covid-19. However, to ensure that people who are infected with Covid-19, a swab test is needed. As many as 94.7% of respondents know about the countries affected by Covid-19, from China to countries in Asia, Europe, to America. Table 3 shows that as many as 67.4% of respondents have a plan to travel in 2020.

Covid-19 is a worrying disease because there is no vaccine or drug that can treat this disease. People are asked not to travel, reduce activities outside the home and avoid crowds. WHO states that the Sars-Cov2 virus can be transmitted through objects that are exposed to the saliva of a person infected with Covid-19. The government implements Large-Scale Social Restrictions (PSBB) to suppress community activities. The positive number of Covid-19 in Indonesia continues to increase, even though the government is aggressively conducting socialization regarding the prevention of Covid-19 such as Clean and Healthy Living Behavior (PHBS). The perception of the risk of Covid-19 and the public's understanding of the risk of Covid-19 can be seen in the following table:

**Table 4.** Perceptions of Covid-19

Statements	Respondents' Responses					Index
	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree	
Covid-19 Is Very Easily Contagious	3 (0.5%)	14 (2.5%)	51 (8.9%)	225 (39.5%)	277 (48.6%)	86.6%
Covid-19 Is Deadly	11 (1.9%)	59 (10.4%)	167 (29.3%)	223 (39.1%)	110 (19.3%)	72.7%
Recognizing the Symptoms of Covid-19	5 (0.9%)	9 (1.6%)	76 (13.3%)	349 (61.2%)	131 (23%)	80.8%
Knowing How to Prevent Covid-19 Transmission	2 (0.4%)	4 (0.7%)	61 (10.7%)	317 (55.6%)	186 (32.6%)	84%
Understand Health Instructions Related to Covid-19 Prevention	3 (0.5%)	1 (0.2%)	55 (9.6%)	316 (55.4%)	195 (34.2%)	84.5%
Fear and Panic with the Covid-19 Outbreak	30 (5.3%)	93 (16.3%)	237 (41.6%)	158 (27.7%)	52 (9.1%)	63.8%
Worried about Traveling Outside the Region Due to Covid-19	7 (1.2%)	16 (2.8%)	75 (13.2%)	264 (46.3%)	208 (36.5%)	82.8%
Traveling Currently Is Very Risky To Get Covid-19	6 (1.1%)	13 (2.3%)	70 (12.3%)	275 (48.2%)	206 (36.1%)	83.2%
Traveling within the country is as risky as going abroad	5 (0.9%)	18 (3.2%)	68 (11.9%)	261 (45.8%)	218 (38.2%)	83.5%
Traveling by Public Transportation Increases the Risk of Contracting Covid-19	6 (1.1%)	7 (1.2%)	63 (11.1%)	274 (48.1%)	220 (38.6%)	84.4%
The Covid-19 Pandemic Will End Soon in 2020	12 (2.1%)	37 (6.5%)	136 (23.9%)	130 (22.8%)	255 (44.7%)	80.3%



From table 4 it can be concluded that the majority of respondents strongly agree that Covid-19 is very contagious. Washing hands and wearing masks are ways to prevent transmission of Covid-19. However, several studies have also concluded that the Covid-19 virus can spread through the air (www.who, int, 2020) although this is still being explored, WHO recommends that people keep PHBS, be environmentally infected and maintain distance and avoid crowds and people who have Covid-19 symptoms such as fever. The majority of respondents also agreed that Covid-19 was deadly. With a fairly high mortality rate, it is not surprising that the public agrees that Covid-19 does have a high risk of death. Massive socialization through mass media and social media from the government, various government agencies and private institutions is quite effective, it is evident that the majority of respondents recognize the symptoms of Covid-19 and how to prevent transmission. Respondents apparently agreed that Covid-19 caused fear and panic. Fear and panic can have an impact on community activities, including economic activity which is believed to have slowed down due to Covid-19. Traveling is something that can generally be postponed if needed. Traveling for vacation is one example of non-primary needs that currently can be met with a virtual tour. Tourism places that have been badly affected by the Covid-19 pandemic use technology to attract visitors. The development of technology allows one to visit certain places using only a VR camera. But it is undeniable that virtual tours are only suitable for recreational areas that do not offer real thrills such as going to the beach, enjoying the sunrise in the mountains and other experiences. The majority of respondents strongly agreed that they were worried about traveling outside the region and considered traveling to increase the risk of contracting Covid-19. Apart from that, respondents also strongly agreed that traveling within the country was as risky as abroad. All provinces in Indonesia have confirmed Covid-19, which means that none of the 34 provinces are free from Covid-19 (covid19.go.id, July 2020). While globally, as many as 188 countries confirmed cases of Covid-19 (www.coronavirus.jhu.edu, 2020) and only 16 countries were not confirmed with Covid-19 (Aydogan, 2020) such as several countries in Africa, Asia (Turkmenistan, Tajikistan and North Korea) as well as countries in the Pacific Island. There are no cases in some of these countries because these countries are remote and / or isolated countries. With a very wide distribution, it is only natural that people are worried about traveling to various regions because the majority of areas have been infected with Covid-19.

Someone who feels that they are at high risk of exposure to disease or and tend to take preventive or preventive action (Brewer and Fazekas, 2007 in Cahyanto et al, 2016). In this case, the public strongly agrees that Covid-19 is very contagious, so they are at high risk of contracting Covid-19. So, to minimize this risk, the community may reduce the activity of meeting many people such as traveling outside the area as a preventive measure. People are proven to be worried about traveling because they believe in the urgency of the current Covid-19 outbreak. Individuals who consider a disease to be serious are likely to take preventive steps to minimize the risk of exposure to the disease. By not traveling, they can reduce interaction with large numbers of people.

The majority of respondents strongly agree that traveling using public transportation increases the risk of contracting Covid-19. Public transportation is a very easy means of transmission because many people can meet and interact. The transmission of Covid-19 is believed to only come from splashes from coughing or sneezing and even through the air in closed and crowded rooms or rooms with air conditioners. With the possibility of airborne transmission, the risk of transmitting Covid-19 on the means of transportation used and bringing many people together becomes higher. Several cases of Covid-19 transmission found on cruise ships are clear examples that meeting many people on one



mode of transportation within a certain period of time increases the risk of transmission. The Indonesian government is trying to suppress the transmission of Covid-19 on public transportation by limiting passenger capacity to document requirements. Public transportation is permitted to carry passengers on condition that the maximum capacity is 50% of the proper capacity. Prospective public transportation passengers such as airplanes and trains are required to show rapid test results if they wish to travel. With this step the government hopes that the spread of Covid-19 can be suppressed.

Even though the majority of respondents strongly agree that Covid-19 is very contagious and it is still not over, they are very confident that the Covid-19 pandemic will end soon in 2020. Data shows that there is still an increase in cases in several countries, even in Indonesia the Covid-19 case continues to increase until 19 July 2020 Indonesia recorded as many as 86,521 cases surpassing cases in China, the country of origin of Covid-19. Experts believe that Covid-19 cases will still increase along with easing activities in several countries such as the United States, Brazil and India. The easing of socio-economic activities has also begun in Indonesia since May 2020. This easing is aimed at making economic activity run again and avoiding an economic recession like the one that occurred in Singapore. Several shopping centers have also opened in several cities with high positive cases of Covid-19, such as Jakarta and Surabaya. This is believed to have triggered the increase in Covid-19 cases in these cities since early July 2020.

**Table 5.** Behavior after the Covid-19 Pandemic

Statements	Total (N=384)	Percentage
Male	148	38.5%
Female	236	61.5%
Age		
Baby Boomers	11	2.8%
Gen-X	39	10.2%
Gen-Y	162	42.2%
Gen-Z	172	44.8%
Travel Destination Plans		
Domestic	302	78.6%
Overseas	24	6.3%
Domestic and Overseas	58	15.1%
Transportation & Accommodation Tickets		
Not Yet Purchased the Tickets	333	86.7%
Already Purchased the Tickets	51	13.3%
Attitude After Covid-19		
Postpone Travel	198	51.6%
Cancel Trip	177	46.1%
Keep Traveling	9	2.3%

The table above shows that out of 384 respondents who plan to travel, the majority of respondents plan to travel within the country (domestic), followed by traveling within the country and abroad (15.1%) and as many as 6.3% plan to travel abroad only. The majority

of respondents stated that they had not purchased transportation tickets and accommodation. While the decision to travel after the Covid-19 pandemic, the majority of respondents decided to postpone traveling (51.6%) and as many as 46.1% decided to cancel the trip. Only 9 respondents decided to continue traveling for reasons of work and vacation and to return home.

The theory of health belief models (The Health Belief Model) states that a person desires to avoid illness and / or disease and believes that health measures will prevent (improve) disease (Janz and Becker, 1984). Perceptions of vulnerability and severity of a condition provide energy or effort to act. Perceptions of the high risk of Covid-19 and concerns about contracting Covid-19 are a consideration for people to make their travel decisions. The decision to postpone and cancel traveling is a decision related to preventive measures for exposure to Covid-19.

Janz and Becker (1984) modify the basic elements of the health belief model and include demographic variables such as age, sex, race and ethnicity, and sociopsychology as variables that play a role in shaping a person's perception of susceptibility to a disease and perceptions of the seriousness (severity) of a disease. thus, determining the perception of the threat of a disease for him. These perceptions will determine their likelihood of taking preventive action. It is evident that respondents in this study strongly agree that Covid-19 is very deadly and highly contagious, so they consider this to be a threat to their safety or health. The easiest preventive action to take for a travel plan is to postpone or cancel it. Demographic variables such as age and gender do not appear to be necessarily related to a person's risk tolerance

Women are generally considered to be more afraid of risk than men (Watson and McNaughton, 2007). Table 5 shows that the majority of respondents who canceled or postponed trips were women. This is sufficient to prove that women tend to avoid traveling to reduce the risk of contracting Covid-19. Table 5 above also shows that the majority of respondents are young (under 24 years), but the action they are taking is trying to prevent or avoid transmission of Covid-19 by postponing or canceling their travel plans. Nosita, et al., (2020) found that age does not affect a person's risk tolerance. Although Covid-19 is very vulnerable to older people, health risks are very important risks and cannot be ignored by everyone regardless of age.

## V. Conclusion

The Covid-19 pandemic is of concern to the whole world because of its very rapid spread with a high mortality rate. With very easy transmission, people become afraid and panic to carry out various activities that involve many people. The Covid-19 pandemic has changed the travel behavior of a large part of society. The results of this survey emphasize people's travel decisions which are associated with perceptions of the risk of Covid-19. The results of this survey show that the majority of respondents out of 570 samples have known about the Covid-19 pandemic since December 2019. With the news through mass media and social media, most respondents have good knowledge about the characteristics of people infected with Covid-19 and other countries. affected by Covid-19.

Meanwhile, as many as 384 respondents stated that they had plans to travel in 2020, but due to the Covid-19 pandemic, the majority of them decided to postpone or even cancel their travel plans for fear of contracting Covid-19. The majority of respondents also agreed that traveling during a pandemic increased the risk of contracting Covid-19 and traveling was an activity that increased this risk. The majority of respondents considered that the risk of traveling within the country was as risky as traveling abroad. Equally risky is the use of

public transportation which involves meeting many people in one mode of transportation. But they believe that the Covid-19 pandemic will end soon in 2020 even though a vaccine has not been found.

Understanding the traveling behavior of the community during a pandemic is very important for managers of tourism spots. Tourist spots can attract visitors by providing facilities that can minimize the interaction of many people such as virtual tours as a new experience that can give a different impression to visitors. In addition, tourism managers can consider strict procedures if they decide to open their facilities such as regulating the number of visitors, providing sufficient space and facilities to support PHBS such as hand washing stations, body temperature gauges and so on. One of the industries that was badly affected during the Covid-19 pandemic was public transportation. With the survey results showing that the majority of respondents believe that the pandemic will end in 2020, so this can be a breath of fresh air for the public transportation industry because people may travel soon when the Covid-19 pandemic ends.

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