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THE APPREHENSIVENESS OF MALAYSIAN CITIZENS TOWARDS THE COVID-19 VIRUS VACCINE

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ABSTRACT

Apprehensive brings the definition of one being anxious or fearful that something bad or unpleasant will happen to them. Humans are bound to feel concerned and apprehensive towards something new and uncommon to the public's eye. In correlation with the COVID-19 pandemic that is currently ongoing, the study is aimed to study the level of concern towards the COVID-19 vaccine and to determine the levels of apprehensiveness towards the COVID-19 vaccine. We distributed an online questionnaire to support the study consisting of 13 items in the demographic section and another 24 questions to measure the level of apprehensiveness and curiosity of our fellow Malaysian citizens. The study incorporated 475 respondents from all over Malaysia through the Google Form platform. All variables were measured through scales previously used by other researchers. All of the factors were assessed using scales that have previously been utilised by other studies. Based on the Krejcie and Morgan Table, $N=475$, $S=210$, the survey amount was determined. The analysis was conducted using SPSS ver. 20 software, and the findings of the spss suggested that our respondents are quite curious (81.9%) and a little over half of the respondents are apprehensive (53.9%).

Keywords

COVID-19, apprehensive, concern, vaccine, Malaysian.

INTRODUCTION

Virus diseases continue to emerge, according to the World Health Organization (WHO), and they cause a serious threat to public health. Several viral epidemics have occurred in the last two decades, including the severe acute respiratory syndrome coronavirus (SARS-CoV) in 2002-2003 and H1N1 influenza in 2009. In 2012, the Middle East respiratory syndrome coronavirus (MERS-CoV) was discovered for the first time in Saudi Arabia (Casella et al., 2021).

These SARS-CoV-2 isolates are members of the Coronaviridae family's Betacoronavirus genus, which is an enveloped single-stranded RNA virus with a 30 kb genome and 14 open reading frames, including four major viral structure proteins: spike (S), membrane (M), envelope (E), and nucleocapsid (N) (Wu, 2020). In humans with coronavirus infection diseases COVID-19 with fever, severe respiratory illness, and pneumococcal pneumonia, the recent outbreak of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), previously known by the provisional name 2019 novel coronavirus (2019-nCoV), in the city of Wuhan in China's Hubei province in 2019–2020 has caused significant numbers of mortality and morbidity (Wu, 2020).

The human-to-human transmission was initially thought to be rare or nonexistent, but we now know that it does happen, though to what extent is unknown. (Perlman, 2020). The resurgence of coronavirus disease 2019 COVID-19, which is caused by the SARS-CoV-2 coronavirus, has resulted in a massive global outbreak and is a significant public health crisis (Chen & Zhu, 2020).

The potential for these viruses to spread globally and cause a pandemic poses a severe public health threat. On February 28, 2020, the WHO updated COVID-19 to a "very high" level of threat to the CoV epidemic. COVID-19 was declared a pandemic by WHO on March 11 after the number of cases outside China increased 13-fold and the number of countries affected tripled, with over 118,000 cases in 114 countries and over 4,000 deaths (Casella et al., 2021). The SARS-CoV-2 pandemic has devastated the most vulnerable in our society, leaving behind more

than 12 million infections, over 550,000 deaths, and an economic toll in the trillions of dollars to date. A vaccine is urgently needed to prevent COVID-19 and, as a result, to avoid complications and deaths caused by the disease's transmission (Heaton, 2020).

As the world was hit with this global pandemic, Malaysia also had a big hiccup once the first case of coronavirus was reported on the 4th of February 2020. When the 41-year-old man became ill with a fever and cough, he had just returned from Singapore. He was quarantined at the Sungai Buloh Hospital in Selangor (First case of Malaysian positive for coronavirus, 2020). Malaysia's first COVID-19 patient to contract through the local transmission were also reported on February 6 2020, whereby a 40-year-old Malaysian woman tested positive for COVID-19. She had no history of travel to infected areas, but she was the younger sister of the 41-year-old man who tested positive for the virus on February 4th, 2020 (Coronavirus: Malaysia records first local transmission., 2020). As of the 18th of May 2021, Malaysia COVID-19 cases rose up to 4,860 only for local transmissions with a total of 47 fatalities (Health DG, 2021).

The current serious epidemic situation has highlighted the need for effective therapeutic and preventive solutions for reducing the disease's risks and transmission. Several countries have accelerated clinical trials in order to develop an effective and safe vaccine to combat the current pandemic according to (Chen & Zhu, 2020).

It is encouraging to see how quickly vaccine development has progressed, with several major vaccine platforms nearing clinical trials. Moderna, BioNTech/Pfizer, CureVac (mRNA-based), and Inovio are among the companies working on nucleic acid-based vaccines (DNA-based) On the basis of viral sequence, DNA and mRNA-based vaccines can be made quickly, allowing for a quick path to the clinic (Corey et al., 2020).

The speed with which this vaccine was developed is remarkable: it took just six months from the publication of the first SARS-CoV-2 sequences to phase 1, compared to a typical timeline of three to nine years. (Heaton, 2020). However, these early phase 1 trials are not sufficiently powered to be able to definitively demonstrate that serious adverse including vaccine-associated enhanced disease (VAED) are not associated with COVID-19 vaccines.

(Haynes et al., 2020). Phase 3 trial's primary efficacy analysis may take place less than 12 months after the phase 1 trial began, and phase 3 trials are expected to include enough incident cases of COVID-19 (Haynes et al., 2020).

In relation to this study, apprehensiveness is often understood as being afraid and paranoid of certain things we do not really know about. Apprehensive means that we view the future with anxiety, where we feel and show fear about what is going to happen. Being apprehensive means that our mind implies that something evil is there or something dangerous is occurring. It makes us keep our guards up on things we think we do not know well enough (Merriam-Webster, n.d.).

When our brain interprets something as a threat, it will send a signal to our body, hence the physical and emotional reactions that happen. Not to worry, this is just a way of your body protecting you naturally. This happens when you see something you do not know, vague or something your internal fears create. Whenever a person is scared of something, a lot can happen to your physical form, for example, a hard pounding heartbeat, sweaty palms and shaky hands. These are completely normal, and what matters is how you react to your fear (Fairview,2019).

There are a few ways in dealing with apprehension so one can manage their fear better. One of them is to read a lot on what you fear so it can clear your head and so you can understand things better. You can also join forums or exchange opinions with other people on topics related to your fears so you can explore more views and information with your fear.

In this study, for example, the apprehensiveness towards the vaccine is something that happens all around the world. Even in our beloved country, Malaysia, a lot of people are apprehensive towards the vaccine in some ways, and as it is understandable of being afraid to something so new to the whole world, we must try to understand and overcome the fear to end the Covid-19 wave in order for everyone to live our normal lives again.

In the context of the Covid-19 vaccine, even with its existing benefits and future potential, a lot of people are still suspicious and are scared of the fact of it being injected into our bodies. People are often scared of what it will do to the body, or if it's an "agenda" to fool humans without social power like in the movies.

Apprehension towards the vaccine can be something very dangerous especially on the health of the population of the whole world as it dampens the want and needs for new vaccines, will stiff innovations for better options as there are no demands, and robs brighter futures from patients. (Scientific American, 2021)

It is very crucial that we deeply help people who are apprehensive towards the vaccine to understand and reduce their level of apprehensiveness in order for us to live a better world, especially in our own country. Michael Vajdy stated that vaccines will always be needed as there are always new pathogens popping up and older ones are constantly changing their surface protein.

There are many ways in influencing people into taking the vaccine, for example, Australia's "No Jab, No Pay" bill that mandates only parents with immunized children can receive credits such as the benefits the government has to offer, and many more. There are many other examples that prove the effectiveness of this approach and by large, the coverage of the vaccine increases whenever mandates are put in place.

However, using this method in a constant manner can lead to more anti-vaccination movements in the future as this may trigger anti vaccines as individuals will definitely fight for their right in choosing to be vaccinated or not.

PROBLEM STATEMENT

Based on the statistics that have been recorded by the World Health Organization, over 1/4 million people around the world have died while more than 4 million people have been infected by the Corona Virus Disease only as of May 2020 (Naeem SB, 2020). Meanwhile, (Elliot, 2020) reported in Time newspaper that the number of people who do not want to get a vaccination has increased each day from 27 per cent during May 2020 to 39 per cent in November 2020. Thus, we decided to conduct this research because we do think that there are so many things to figure out about the apprehensiveness of Malaysian citizens towards vaccines of Novel CoronaVirus Disease 2019. Some people may say, it is not a big deal for you since you are going to accept whatever it takes. However, we cannot forget and deny the fact that there are people who hesitate or cannot tolerate vaccines. In fact, there are types of people who are diehards rejecting the COVID-19 Vaccines where the number of people in that group has been increased from 11 per cent to 18 per cent as of 2020 (Elliot, 2020). This type of person can be

considered as a person who is apprehensive towards vaccines. Discussing the apprehensiveness of people towards COVID-19 vaccines, these can be supported according to an article that has been written by a Faculty of Public Health (Vergara, 2021) where they found that nearly a quarter of medical students were detected as the ones who hesitate towards COVID-19 vaccine. Apart from that, talking about a vaccine of a new virus that is currently hitting the world is a great topic to discuss. At the end of this research, I can ensure the readers will understand why some of the Malaysian citizens are apprehensive towards the COVID-19 vaccine even after the government used a lot of methods to gain their trust.

According to (Network, 2021), there are few types of vaccines that have been authorized by the United States such as Pfizer-BioNTech, Moderna vaccines and mRNA vaccines. Malaysia, which is one of the countries that was affected by the COVID-19 also took a few types of vaccines from other countries as an alternative to prevent and combat the virus. According to Jayatilaka (2021) in her article entitled “The 5 Covid-19 Vaccines in Malaysia's National Vaccination Programme”, Malaysia has used 5 types of vaccines in order to make Malaysia's National Vaccination Programme successful. The types of vaccine that has been used by our country are Pfizer-BioNTech, AstraZeneca, Sinovac, CanSino Biologics, and Sputnik V. In realizing towards the existence of various types of COVID-19 vaccines, Malaysian citizens who were apprehensive towards any type of vaccines might being triggered and cannot stop from thinking about the bad of vaccines such as the consequences of taking the vaccines and the harm of COVID-19 vaccines towards the body. When we talk about vaccines, it is very synonymous with the ingredients that have been used in making the vaccine. Whether we realize it or not, there are a lot of people out there being so obsessed with getting to know what type of ingredients and why that ingredient is being put in that vaccine. Referring to the (Male, 2021), a survey that has been done by ‘Find Out Now’ has revealed that more than a quarter of young women in the United Kingdom refused to get the vaccination as they worry about the condition of fertility after getting the vaccinations. The increase in numbers happened when they found out the false rumours that one of the senior employees at Pfizer stated that he worried about the condition of the placenta since antibodies produced by COVID-19 vaccines might harm. From this scenario, we can see that many among us try to give their best in figuring out what does COVID-19 vaccines contain. Putting aside from what field they came from, it surely will not stop them from judging and studying the ingredients that have been used and spreading unethical rumours about the COVID-19 vaccines.

Besides, the apprehensiveness of Malaysian citizens towards the COVID-19 vaccine might occur from the act of religious leaders during the 18th century who used to describe vaccine as something that is only an agenda that has been made by a certain party for the benefit and that beliefs go on until today. Davey (2020) in her article stated that people who have a strong belief in religion are more likely to be apprehensive towards COVID-19 vaccines. This statement can clearly support my earlier statement where the agenda that has been brought by the religious leaders is still being used up until today. Moreover, according to Silverman (2020) in his writing entitled “Vaccine mandates vs. religious beliefs – the legal arguments for the upcoming coronavirus lawsuits”, people who are apprehensive towards COVID-19 vaccines may argue the requirements of the vaccine by using religious liberty. The author, who is a public health lawyer and an ethicist stated in his writing that his answer to the questions regarding the vaccines also depends on what terms it will be applied. Considering his statement, this shows us that it is normal for us as a person to be apprehensive over things that we are not certain about. However, that does not mean we can refuse from taking the COVID-19 vaccines. (Silverman, 2020) added in his article that people might be apprehensive towards COVID-19 vaccines because of the misinformation and conspiracies that have been spread during this epidemic. Thus, people who are already hesitant with the COVID-19 vaccines become more apprehensive after listening to the misinformation or conspiracies that have been shared with them. In conclusion, the feelings of apprehension may be caused by various reasons and being hesitant towards the ingredients and also being deceived by the agenda that has been brought by the religious leaders are the factors that contributed to the feeling of apprehension.

RESEARCH QUESTIONS

1. What is the level of concern towards the COVID-19 vaccine?
2. What is the level of apprehensiveness towards the COVID-19 vaccine?

RESEARCH OBJECTIVES

1. To identify the level of concern towards the COVID-19 vaccine.
2. To determine the levels of apprehensiveness towards the COVID-19 vaccine.

LITERATURE REVIEW

Malaysians' apprehensiveness towards the vaccine.

Apprehension towards the vaccine is not a joke, as it occurs everywhere across the globe. If we do not educate people on how important and how the vaccine is not harmful, the numbers of anti vaccines may increase with time.

Factors of apprehensiveness

I) Phobia

Phobia towards the vaccine is one of the most destructive behaviour in recovering the population from the pandemic, as some people are uncooperative in spite of the medical research teams working against the clock to find the best option in winning the war against the virus, that has been destroying lives for the past 2 years (Jaganathan, 2021).

II) Rumours

What's more frustrating about the issue is that most of the apprehension begins from rumours with no scientific base spreading around on social media platforms, creating unnecessary panic amongst those people who do not investigate and just blatantly trust whatever they read on the internet. Typically though, humans believing the negatives instead of the positives in speculations are quite common.

III) Fear of after effects

In Malaysia, for instance, the Ministry of Health said that with their findings in a survey they put out, about 33% of the Malaysian population agreed that they are concerned, suspicious and apprehensive of the COVID-19 vaccines with most of them expressing fear of the possible effects after receiving the jab (*Local doctors and scientists*, 2021).

IV) Lack of knowledge and wariness

One of the main reasons that cause people to have doubts and are apprehension of the vaccine is the lack of knowledge and wariness of the medical manufacturing as well as fake news being spread at the same time. According to Jaganathan (2021), generally, people assume that the vaccine has not been tested properly and that it might be harmful.

V) Imaginary agenda

Another reason is the imaginary agenda whereas the first world countries are trying to reduce the population by jabbing vaccines into our bodies, as related to the cultivation theory where people perceive things they see on media like movies, or novels and believe them to be a reality. A movie example with this kind of scenario is Divergent, where the upper colony tries to get rid of the 'weaker' ones by killing them.

Malaysian's concerns towards Covid-19 vaccines

I) Less number of participation in getting the COVID-19 Vaccine

Covid-19 vaccination is still a new thing in Malaysia, the number of vaccinations done by the government according to the World Health Organization as of May 2nd 2021 is only 1,421,664 vaccine doses have been administered. The numbers of citizens being vaccinated are less than five percent of the Malaysian population.

II) Side effects of the vaccination leads to the concern of Malaysian citizens

According to New Straits Times (2021), the move to inoculate those aged over 60 years old with the AstraZeneca vaccine has caused concerns among Malaysian citizens. Maidzaton Shalawati, who is currently a medical practitioner in Saudi Arabia, suggested the government use Pfizer for senior citizens as based on experience, even recipients in their 30s to 50s established strong side effects after being injected by the AstraZeneca vaccine (title,2021). The media continue to report that many Malaysian citizens took social media as a platform to voice their worries over allowing their parents and other senior citizens to take the vaccine even though the blood clot side effect was very rare.

III) Government observation towards the concern of Malaysian citizens

According to the Prime Minister's office of Malaysia Official Website (2020), the Prime Minister Tan Sri Muhyiddin Yassin said that "a recent study by YouGov, a British international Internet-based market research and data analytics firm, found that 82 per cent of Malaysians are ready to be vaccinated, and he hoped that the number will eventually reach 100 percent." WHO has seen an encouraging trend towards more people wanting to get vaccinated against Covid-19 (Ying-Ru and Almarhum Sultan Abdul Halim Mu'adzam Shah).

IV) The uncertainty does not affect their decision to get the vaccination

A study held by World Economic Forum-Ipsos mentioned that last August indicated two out of three people in Malaysia were uncertain about being immunised. A survey conducted by the Malaysian government published in late December shows encouraging progress among the population regarding their perception of immunization, with two-thirds of people in Malaysia saying yes to Covid-19 vaccines (Ying-Ru and Almarhum Sultan Abdul Halim Mu'adzam Shah).

Malaysian's perspective on anti-vaccine

I) National Immunisation Program

Although Malaysia recorded a very high acceptance rate towards the COVID-19 vaccine at 94.3%. (Sallam, 2021). Malaysian is well known for its acceptance towards vaccination. Whether it is from the National Immunisation Program (NIP) towards the COVID-19 vaccine (Sallam, 2021). The anti-vaccination movement's dissemination of inaccurate and irresponsible information may do more harm than good to the communities. (Ahmed et al., 2018). However, we still can not deny there are a few factors why hesitancy towards vaccines within the anti-vaccine movement. Vaccine hesitancy is a multi-layered phenomenon, related to various factors including the influence of anti-vaccination rumours, past experience of AEFIs, perceived religious prohibition, a belief that traditional complementary and alternative medicine (TCAM) use is safer, pseudoscience beliefs, and anti-vaccine conspiracy theories. (Wong, Wong & AbuBakar, 2020).

II) Nutritional Supplements

Anti-vaccine also brought up the anti-vaccination industry agenda. A report from the Center for Digital Hate Counters shows that well-being and nutritional supplement companies are major supporters of anti-vaccination campaigns and directly benefit from them. We can see that in Malaysia itself that citizen is still dependable with all these overclaimed nutritional supplements. (The Lancet Infectious Diseases, 2020).

III) 5G Microchip

Conspiracy theories and misinformation have been widely circulated, from links to 5G tower claims that Bill Gates is microchipping people with vaccine development (Megget, 2020). Social media is actively used by the anti-vaccination movement to amplify their messages and

target those unsure about vaccines, particularly parents (Megget, 2020). A report from the London School of Hygiene and Tropical Medicine is that one of the most prevalent concerns is the too rapid development of new Covid-19 vaccines that will not be safe enough and way too many unknown and harmful ingredients (Megget, 2020). Worse, vaccine-resistant content is deliberately held by social media giants to reach up to 58 million followers and generate a cumulative advertising revenue of US \$1 billion (The Lancet Infectious Diseases, 2020).

IV) Past experience

The steady rise in reported cases of vaccine-preventable childhood diseases (VPDs), particularly measles, as well as several toddler deaths from diphtheria, have raised concerns about a significant rise in vaccine hesitancy in Malaysia. The following were among the reasons for incomplete or non-uptake of vaccination, according to data from the National Health and Morbidity Survey (NHMS) 2016 vaccination module. Firstly, issues with healthcare facilities, such as a shortage of vaccine stocks. Secondly, it included personal reasons, such as time constraints, missed clinic/hospital appointments, geographical barriers, vaccine refusal, and concerns that vaccines are non-halal (permissible under Islamic law), as well as prior adverse effect experience (L. P. Wong, et al, 2020).

V) Halal status

While several reports have indicated potential factors that contribute to the increase, these factors alone may be misleading because they do not consider the larger context of local cultural, traditional, and religious health beliefs, conceptions, and misleading information. (L. P. Wong, et al, 2020). As a result, in order to stem the rise in VPDs in Malaysia, it is critical to determine the major reasons for vaccine hesitancy. The other side of why this anti-vaccine movement rose up was because of the halal status of the vaccine. They believe that vaccines are thought to be contaminated with pig DNA, rendering them inadmissible or haram for the Muslim community. In Muslim-majority countries like Malaysia, studies have discovered that the halal status of a vaccine is the most important factor in deciding whether or not to accept it. (Ahmed et al., 2018).

RESEARCH METHODOLOGY

Research Design

This study employed a quantitative study that approached the Malaysian citizens' apprehensiveness towards the covid-19 virus vaccine. The data was collected through an online survey using the platform Google Forms. The methods had been used to distribute a questionnaire by using social media platforms such as Instagram, Facebook, Twitter and WhatsApp Messenger. A four scale was used for the respondents to answer the question relating to measuring the apprehensiveness of Malaysian citizens towards the COVID-19 Vaccine.

Research measurement

The study consists of 37 questions and has been divided into three sections namely section A, Demographic has 13 questions, while section B the levels of concern towards the COVID-19 vaccine have 12 questions and lastly section C the levels of apprehensiveness towards the COVID-19 vaccine has 11 questions.

Data Analysis

The method used to analyze the data is through Statistical Package of Social Science (SPSS) software version 23. The data analysis procedure includes creating surveys and data transferring. The questionnaire was distributed on 2 June 2021 and it took approximately two weeks to encourage the respondent to respond to the questionnaire. The research gathered 475 respondents. The 475 respondents have responded to the questionnaire and the answer was used for data collection. The question that gets the highest mean for the first section is "I think social media platforms create unnecessary panicking that leads to apprehension" with 3.47 while for the second section, "I am curious with the COVID-19 Vaccine" has been recorded as the highest mean with 2.84. Researchers use descriptive statistics to see the overall mean from the research findings. (Ridzuan et al., 2015)

FINDINGS

Table 1: Distribution of the respondents by demographic (n=475)

Profile	Frequency	Percentage (%)
SEX		
· Male	145	30.5
· Female	330	69.5
MARITAL STATUS:		
· Single	456	96
· Married	19	4
AGE:		
· 18-22 years old	400	84.2
· 23-27 years old	51	10.7
· 28-32 years old	10	2.1
· 33-37 years old	5	1.1
· 38-42 years old	4	0.8
· 42 years old and above	4	0.8
· 15	1	0.2
RACE:		
· Malay	447	94.1
· Chinese	10	2.1
· Indian	6	1.3
· Others	12	2.5
HIGHEST-EDUCATION LEVEL:		
· SPM	26	5.5
· Foundation/Matriculation/STPM/Diploma	188	39.6
· Undergraduate (Degree)	248	52.2
· Postgraduate (Masters Degree, PhD)	13	2.7

STATES:

• East coast (Kelantan, Pahang, Terengganu)	51	10.7
• Northern region (Perak, Pulau Pinang, Kedah, Perlis)	35	7.4
• Central region (Selangor, Kuala Lumpur, Putrajaya)	289	60.8
• Southern region (Negeri Sembilan, Johor, Melaka)	86	18.1
• West Malaysia (Sabah, Sarawak, Labuan)	14	2.9

PLACE OF ORIGIN:

• Urban area	206	43.4
• Suburban	226	47.6
• Rural area	43	9.1

OCCUPATION:

• Student	394	82.9
• Working at a private sector	49	10.3
• Working at a Government sector	11	2.3
• Self employed	8	1.7
• Unemployed	13	2.7
• Housewife	-	-
• Retire	-	-

HOUSEHOLD GROUP ACCORDING TO MONTHLY INCOME

• B40 (RM 4 360 and lower)	241	50.7
• M40 (RM 4361 – RM 9619)	168	35.4
• T20 (RM 9620 and higher)	66	13.9

Table 1 above shows the demographic of respondents for a survey on The Apprehensiveness of Malaysian Citizens Towards COVID-19 Vaccine. Based on the findings that we gathered, most of the respondents who answered the questionnaire were female (69.5%) and male (30.5%), aged between 18-22 years old (84.2%), Malay (94.1%) and an undergraduate student (52.2%). Most of the respondents are from the central region (Selangor, Kuala Lumpur, Putrajaya) (60.8%) and

live in the suburbs (47.6%). Meanwhile, the majority of the respondents who answered this questionnaire are among the students (82.9%) and work in private sectors (10.3%) with a B40 household group (50.7%).

Table 2: Opinion of The Respondents

Profile	Frequency	Percentage (%)
ARE YOU CURIOUS ABOUT THE COVID-19 VACCINE?		
· Yes	389	81.9
· No	86	18.1
ARE YOU APPREHENSIVE TOWARDS THE COVID-19 VACCINE?		
· Yes	256	53.9
· No	219	46.1
ARE YOU WILLING TO TAKE THE COVID-19 VACCINE?		
· Yes	468	98.5
· No	7	1.5
IF I AM GIVEN THE CHANCE TO PICK A VACCINE, I WOULD CHOOSE:		
· Pfizer	119	25.1
· Sinovac	5	1.1
· AstraZeneca	57	12
· I do not really mind	293	61.7
· I am not interested with any vaccine	1	0.2

For table 2, the data that has been collected shows that the majority of our respondents are curious about the COVID-19 Vaccine with 389 (81.9%) total number while the frequency of respondents who are not curious are only 86 (18.1%). Among the 475 respondents who answer

this questionnaire, 256 (53.9%) are apprehensive towards the COVID-19 Vaccine while 219 (46.1%) of them are not apprehensive. However, 468 (98.5%) of the respondents are willing to take the vaccination and 293 (61.7%) of the total number do not really mind what type of vaccination that will be given to them.

Table 3: Level of concern towards the COVID-19 Vaccine

Level of concern towards the COVID-19 Vaccine	Mean
I am curious about the COVID-19 Vaccine	2.84
I think that people who have strong beliefs in religion are more likely to be concerned towards the COVID-19 Vaccine.	2.66
Strong side effects after being vaccinated is one of my concerns.	2.34
I believe halal status is one of the biggest concerns regarding the COVID-19 vaccine.	2.27
I see nutritional supplement companies as one of the biggest anti-vaccine movements.	2.17
I am concerned towards the type of COVID-19 Vaccine that I will receive.	2.16
Blood clot side effects that has been reported by social media increases my concern level.	2.10
COVID-19 Vaccine ingredients is one of the factors why I am triggered to be concerned.	1.76
I have hesitations towards the COVID-19 Vaccine.	1.72
False rumors tend to make me hesitate of being vaccinated.	1.70
I believe nutritional supplements more than COVID-19 vaccine.	1.51
I am influenced by anti-vaccine movements in Malaysia.	1.30
I am influenced with religion conspiracies hence I refuse to get the COVID-19 Vaccination.	1.30
Overall	1.98

The data analysis in table 3 clearly shows that most of our respondents are curious about the COVID-19 Vaccine (M=2.84). This is supported by a writing as an author mentioned that a lot of

people are curious regarding the ingredients in the COVID-19 vaccines available today (*What is the Full List of the COVID-19 Vaccine Ingredients?, n.d.*). The respondents also believe that people who have strong beliefs in religion are more likely to be concerned towards the COVID-19 Vaccine (M=2.66). According to an article, as businesses rush to create a COVID-19 vaccine and countries hurry to acquire doses, worries regarding the usage of pig products — which are prohibited by some religious organisations — have generated fears of vaccination programmes being interrupted (*Concern among Muslims over halal status of COVID-19 vaccine 2020*). Overall, the average mean for the level of concern towards the COVID-19 Vaccine is (M=1.98). In an article, it is explained that some adults are concerned about getting sick from COVID-19, but they are also concerned about vaccination safety, effectiveness, and adverse effects (Liz, 2021).

Table 4: Level of apprehensiveness towards the COVID-19 vaccine

Level of apprehensiveness towards the COVID-19 vaccine	Mean
I think social media platforms create unnecessary panicking that leads to apprehension.	3.47
I think that apprehension towards the vaccine is destructive towards the efforts in winning against the pandemic.	3.26
I believe Malaysian has the lowest acceptance rate towards COVID-19 vaccine because people are apprehensive.	2.82
I am apprehensive of the vaccine because I lack knowledge and awareness in the medical field.	2.03
As a Malaysian citizen, I am apprehensive towards the COVID-19 vaccine.	2.02
I am apprehensive of the COVID-19 vaccine because I do not want any side effects.	1.92
I am apprehensive that the vaccine has not gone through proper testing.	1.82
I am apprehensive towards the vaccine after I read rumours about it on the internet.	1.81
I believe that death cases from the past National Immunisation Program (NIP) made me become an anti-vaccine because I am apprehensive.	1.50
I am apprehensive towards the COVID-19 vaccine because I believe that the COVID-19 vaccine contains non-halal items (EX: pig DNA, etc) in the ingredients.	1.46

I am apprehensive towards the COVID-19 vaccine because I believe the ingredients contains microchip	1.40
Overall	2.13

The data analysis in table 4 clearly shows that most of our respondent's social media platforms create unnecessary panicking that leads to the apprehension (M=3.47). This can be supported by (Puri et al., 2020) where there is considerable potential for harmful misinformation to extend across networks that create unnecessary panicking spreading through the modern vaccine movement, which fuels vaccine hesitation. The respondents also believe that the apprehension towards the vaccine is destructive towards the efforts in winning against the pandemic (M=3.26). According to Barello et al.(2020) in supporting these statements, The World Health Organisation (WHO) has regarded the idea of '*vaccine hesitancy*' as '*one of the top ten global health threats*' whereby Italy used to be recorded with the highest number of measles cases but there is a higher rate of vaccine hesitancy until Italy introduce a law prescribing a mandatory vaccination. Overall, the average mean for the level of apprehensiveness towards the COVID-19 vaccine (M=2.13). As stated by Moberly (2021) where researchers have indicated that the increase in people seeking the vaccine may be caused by public health messages or by the increasing number of individuals receiving the vaccine.

CONCLUSION

Based on the research that we have conducted, we found out that there are still a lot of people out there who are apprehensive towards the COVID-19 Vaccine. There are a lot of factors that can lead an individual in becoming apprehensive towards the COVID-19 Vaccine such as the sharing of fake news regarding vaccines in social media, the act of religious beliefs especially in spreading non-science based 'knowledge', the Halal status of the vaccine, the side effects of being vaccinated, and the lack of knowledge and wariness towards the COVID-19 Vaccine.

As we go through our findings based on the survey that has been distributed, we do realize that the feeling of apprehensiveness towards the COVID-19 Vaccine is not affecting some of the respondents' decisions to get vaccinated. This can be proven by the answer of the demographic section which shows that 468 (98.5%) of the respondents are willing to take the COVID-19 Vaccination.

However, apart from the acceptance of the respondents towards the COVID-19 Vaccines, we are getting worried about their answer to the survey which really shows their feelings of apprehensiveness. As we went through our research, we started to realize that this matter should be taken seriously. In an effort to curb this matter from getting worse especially in our community or society, it is a must for everyone to play their own role as best as they can. This is because things will not be fixed if there is only a small group of the society who takes their part in solving this matter.

The feeling to be responsible is needed in every individual in our society to make sure the level of apprehensiveness towards the COVID-19 Vaccine will be decreased. The attitude or irresponsibility in spreading fake news regarding the COVID-19 Vaccine especially on social media should be stopped as it is the most crucial part that should be fixed in our society. Whether we realize it or not, that kind of act can simply influence the citizens as it will scare them, especially the ones who do not have any knowledge in medical fields.

Not to forget the anti-vaccine category should start to realize the importance of having a vaccine. An action of spreading propaganda about the bad effects of vaccines should be stopped as it is not a rational thing to do. As much as we respect your decision for being an anti-vaccine, your category should respect our decision for being vaccinated for the sake of our protection.

Therefore, actions should be taken towards this matter as we are concerned about the situation of our society especially when the number of daily reported cases of COVID-19 keeps on increasing each day. It is beyond worrying when the daily cases reached 13,215 in a day. At the same time, it is somewhat awkward and frustrating to hear when someone says he or she does not want to take the vaccination as they are apprehensive towards the COVID-19 Vaccination.

Last but not least, we do really hope that the number of people who are apprehensive towards the COVID-19 Vaccination can decrease each day. Together we stand to curb this matter to have a better generation and future.

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