

Perception of Public on COVID-19 Immunisation Program in Malaysia

Pandangan Awam terhadap Program Imunisasi COVID-19 di Malaysia

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ABSTRACT

Due to the COVID-19 pandemic, many countries have implemented the vaccination program to combat the spread of virus in order to return to a normal life after the quarantine period. The success of vaccination has shown the decrease in infection and death besides the practice of physical distancing. This article will discuss the category of people who have doubt, confidence and their view towards The National COVID-19 Immunisation Programme (NIP) in Malaysia. A quantitative survey was made through an online survey using Google Form. The recruitment of the survey participants was based on a convenience sampling method. This survey was conducted on Malaysian citizens of age from 18 to 57 years old and analysed using One-way ANOVA method. In this research, a number of 363 people answered the survey. There was a significant difference in the categories of occupation, education and age regarding confidence, doubt and view towards NIP. Research findings found that occupation, education and age were seemed to justify the decision made by the respondents either to accept or decline the vaccination at national level. Overall, the aspects of occupation, education and age should receive attention in the future in public health program implementation so that these categories can obtain much clearer information.

Keywords: COVID-19 vaccines; Malaysian citizen; vaccine acceptance; vaccine hesitancy; sociology

ABSTRAK

Disebabkan oleh pandemik COVID-19, banyak negara telah melaksanakan program vaksinasi untuk memerangi penyebaran virus agar rakyat kembali ke kehidupan normal selepas tamat tempoh kuarantin. Kejayaan vaksinasi menunjukkan penurunan jangkitan dan kematian selain amalan penjarakan fizikal. Artikel ini akan membincangkan kategori masyarakat yang mempunyai keraguan, keyakinan dan pandangan mereka terhadap Program Imunisasi COVID-19 Kebangsaan (PICK) di Malaysia. Kaedah kuantitatif telah dibuat melalui tinjauan dalam talian menggunakan 'google form'. Responden dipilih melalui kaedah persampelan 'convenience'. Survei ini dijalankan ke atas warganegara Malaysia berumur lingkungan 18 hingga 57 tahun dan data dianalisis menggunakan kaedah ANOVA Sehalu. Dalam kajian ini, seramai 363 responden telah menjawab survei. Terdapat perbezaan yang ketara dalam kategori pekerjaan, pendidikan dan umur berkenaan keyakinan, keraguan dan pandangan mereka terhadap PICK. Dapatan kajian mendapati bahawa pekerjaan, pendidikan dan umur seolah-olah mewajarkan keputusan yang dibuat oleh responden sama ada menerima atau menolak vaksinasi di peringkat kebangsaan. Secara keseluruhannya, aspek pekerjaan, pendidikan dan umur perlu diberi perhatian pada masa hadapan dalam pelaksanaan program kesihatan awam agar kategori tersebut dapat memperoleh maklumat yang lebih jelas.

Kata kunci: Penerimaan vaksin; penolakan vaksin; rakyat Malaysia; sosiologi; vaksin COVID-19

INTRODUCTION

Malaysia was hit by the outbreak of COVID-19 when curfews and lockdown were implemented in mid-March 2020. Together with other countries, Malaysia sought solutions to curb the spread even though deaths from COVID-19 infections began to rise daily. Immediate punishment for people who disobey the lockdown order is implemented to curb the spread of the COVID-19 outbreak because many citizens are still unaware of the threat of COVID-19. Various strategies are implemented by the Malaysian government to target all citizens to receive vaccinations as other countries do. Various approaches have been taken by the government to ensure that 80 percent of the people receive the vaccine because many are opposed to vaccination to enable Malaysia to change its status from pandemic to endemic. The Malaysian government received strong opposition regarding The National COVID-19 Immunisation Programme (NIP) when there was a spread of news related to the death of vaccine recipients and subsequently caused a number of people to become anti-vaccine.

In social media, people's reactions related to vaccination also occur in various countries not only in Malaysia but also the world and ASEAN countries. ASEAN member countries have verified at least 869,515 positive cases and recorded 21,076 deaths on 17th October 2020 due to COVID-19 pandemic. However, the real figure could be much higher due to the big number of unreported or undiagnosed cases particularly in developing countries with poor medication system. Indonesia has the highest death ratio until August 2020, while Singapore has the lowest number of deaths (Djalante 2020). When ASEAN countries are facing with such pandemic, Global Vaccination campaign at ASEAN level is carried out with the cooperation from a few countries to ensure the vaccine supply for low income ASEAN countries is received. In January 2020, ASEAN has activated the province health mechanism to support members of the countries by the means of reaction towards COVID-19 including the vaccine supply (The ASEAN, 2020). Starting from 30th December 2020 to 14th February 2021, Singapore, Cambodia and Indonesia are among the earliest countries that implement the vaccination program in ASEAN member countries (Our World in Data 2021).

Singapore, which reported the number of death cases that is quite low, has implemented the vaccination program in early January 2021. Vaccination program in Singapore receives attention

of its citizens when Singapore President ordered the citizens to take injection while launching the "#IGotMyShotSG" campaign in many languages at social media through his administrative agencies (Government of Singapore, 2021). The history of health care implemented by World Health Organization (WHO) upon Cambodia has enabled the country to become the earliest ASEAN country that receives vaccination aid in early March 2021 (World Health Organization 2021). Before receiving COVID-19 vaccination aid, Cambodia has made it mandatory to government servants and the army to receive the injection to avoid sceptical issue towards vaccine. On February 2021, a number of 600,970 people had voluntarily received the injection while 566,420 people were vaccinated (Asia Times 2021)

The most dominant issue in Indonesia for vaccination program is regarding the halal status of vaccine that will be given to the republic citizens. After knowing the halal status issue, Indonesian ruler sent the Islamic officer to vaccine manufacturer country to check the vaccine manufacturing process. This is because the acceptance reaction is very low in Aceh province while the acceptance of Muslim residents is very low as compared to other religions (Ministry of Health of the Republic of Indonesia, 2020). Once the status is guaranteed as halal and safe, Indonesian citizens have widely accepted the vaccination program through entertainment such as songs made by artists with the theme "Vaccine for Indonesia" (Kompas.com. 2020; Medcom.id. 2021).

Vietnamese residents believe in the ability of their government to handle citizens' problem which is why Vietnamese always comply with the planning of their government since Vietnam is attacked by COVID-19 (Sarifin & Yusoff 2020). This reaction is ongoing with regard to vaccination distribution process to the residents. There are three factors of the slow vaccination program in Vietnam; the first one is the success of the country in controlling the spread of the virus since 2020 by closing the country border and implementing an aggressive quarantine. Secondly, four Vietnamese companies have developed local COVID-19 vaccines to make local vaccine a success by reducing the reliance on imported vaccine. Third, there was a short supply of vaccine booked by private companies in 2020 and Vietnam was not given the attention by COVAX facility from WHO because of the success in handling COVID-19 (Yusof Ishak Institute 2021). With the spirit of "Vietnamese", public citizens and companies in Ho Chi Minh City contributed US\$1.1 billion to pay for vaccination program cost. The

initiative has attracted more than US\$250 million after only a few days (Yusof Ishak Institute, 2021).

Myanmar is the only country that is the readiest to take vaccine with 96% compared to 116 countries researched by Gallup in 2020 (Gallup. Inc. 2021). Nevertheless, Myanmar is not so active in vaccination program (Our World in Data 2021). It is because of the toppling of the government in February 2021 which leads to the paralysis of its health system. The health care party could not implement vaccination program as carried out earlier by National League for Democracy government (NLD). The conflict that happens in Myanmar has changed the citizens' reaction towards vaccine (Our World in Data 2021). One cause of concern is that the regime has started using vaccines sourced from China. In early May, it received a shipment of half a million doses of Vero Cell, a vaccine backed by the Chinese military. In a country where anti-Chinese sentiment runs strong, this was seen by some as further evidence of Beijing's self-interested role in perpetuating Myanmar military's grip on power (Myanmar Now. 2021)

In Malaysia, sources on vaccination program are officially obtained from the Ministry of Health Malaysia (Ministry of Health of Malaysia, 2021). As of January 5, 2023, 49.9 percent of the population in Malaysia were fully vaccinated against COVID-19. Among the Malaysian states, Putrajaya, Selangor, and Kuala Lumpur had the highest fully vaccinated population rate, at 70.3 percent (Statista Research Department 2023). However, The National COVID-19 Immunisation Programme, abbreviated as NIP which is currently implemented by Malaysian government receives positive and negative reactions. Based on the proposal that this research regarding vaccine declination among the citizens in Malaysia should receive attention, therefore the objective of this paper was to see the reactions of Malaysian citizens towards the implementation of vaccination program and the factors of vaccine acceptance and declination. These varied reactions result from many factors that comprise self and social environment which influence the acceptance and declination towards vaccine as in past research conducted in numerous countries in which the trend of acceptance and declination towards COVID-19 vaccine was found to happen across the world and not only in Malaysia where the issue exists. Also, the social environment is affected by the economic and political situation because it involves the relationship of political party followers due to the existence of an unstable government (Yusof Ishak Institute 2021).

Nevertheless, this research focusing on Malaysian context was carried out to see the social category that contributes to this trend of accepting and declining COVID-19 vaccine in Malaysia.

LITERATUR REVIEW

Various perceptions of the immunization program while curbing the COVID-19 pandemic. Many factors are challenges faced such as for travel, work and religious purposes. such things have caused the immunization program to be received with various reactions. Wang et al. (2021) explaining the deep desire to travel after facing curfews caused the community to accept immunizations. Celebrations such as The Golden Week in China and Thanksgiving holiday in the United States cause the desire to travel to increase in addition to celebrating festivals that require crossing national borders. Among the causes of vaccination accepted by travellers in Wang et al. study is due to safety concerns, efficacy concerns, cost concerns, time concerns, access concerns, autonomy concerns.

India's large population means that people cannot avoid receiving vaccinations. This coupled with vaccination is a current requirement to curb the spread of the COVID-19 disease outbreak apart from viruses that exist due to poor air quality. although there is skepticism about the vaccine, the Covishield type vaccine is the most preferred (Agrawal et al. 2022). Acceptance of vaccines in India is also influenced by a sense of safety and to protect their children. In other countries, taking vaccinations, especially among Muslims, is to perform worship when the Saudi Arabian government reopens the country's borders for Muslims going for the pilgrimage while vaccinations are taking place all over the world (Chan et al. 2022).

Vaccine hesitancy is caused by several things as explained by Dettori et al. (2022). emotional factors and fear related to the risk of short vaccination are produced as factors of doubt in the acceptance of vaccination. Among the reasons for rejection is due to the complexity of communication processes necessary for vaccination compliance, listening forms the basis for clear and effective communication with users such as the study conducted on Italians. It is also not an exception in Malaysia when there are many rejections of vaccination when there is inefficient communication in the delivery of information related to vaccination (Yusoff & Sarifin 2022).

METHOD

RESEARCH DESIGN

To meet the study's objectives, a quantitative approach was applied. This study employed a survey method that was sufficiently precise to be used on a wide population.¹⁶ In the Malaysian context, a cross-sectional survey study was perceived to be the most accurate way of gathering information on reactions to the COVID-19 vaccines. A cross-sectional study involves looking at different people on one key characteristic at a specific point in time. Data are collected at the same time from people who are similar in other characteristics but differ in key factors of interest such as age, income level, or geographic location. A lot of data can be obtained because internet access in Malaysia is very wide which can penetrate respondents in rural areas. The data were collected online using the Google Form platform. Participation in this survey study was solicited through social media.

RECRUITMENT PROCEDURE

Participants who gave consent were willing and volunteered for this study would read the instruction guideline and then press the 'Continue' button to complete it on their own. Survey questions have been consulted by experts in the field to help in terms of study protocol, procedures, information sheet and consent statement. This cross-sectional survey was performed from June 5 to June 30, 2021. The study's goal sample size was 300 (Malaysian populations aged 18 years and above), which was obtained by choosing the lowest admissible measure from the demographic subgroup with an error margin of 5% and a confidence level of 95% (Jones et al. 2013; Conroy, 2015). The researchers decided to conduct an online poll using Google Forms. Malaysians aged 18 years and above and residing in this country are suggested to participate in the survey. The researcher used several strategies to reach as many respondents as possible throughout the country during the three-week data collection period. This includes relying on professional and personal networks of the researchers, reaching out to community leaders and post on several social media groups. To distribute this survey study, two primary channels were used: social media (Facebook, Twitter and Instagram), as well as WhatsApp and Telegram. The study's overviews were presented in note WhatsApp messaging or social media links to construct a joint

investigative Malay version. A total of 363 people took part in this survey investigation.

STUDY INSTRUMENT

The survey research instrument was a modification of a measure developed in collaboration with the World Health Organization (WHO) in a study on Indonesians' acceptance feedback to the COVID-19 immunization program (Ministry of Health of the Republic of Indonesia, 2020). The survey was divided into four major themes: 1) demographics, which examined participants' socio-demographic characteristics such as gender, age, religion, level of education, occupation and household income; 2) understanding of the COVID-19 vaccination program; 3) trust in the COVID-19 vaccine program; 4) questions about the COVID-19 vaccine program and 5) significant points of agreement or disagreement concerning the COVID-19 vaccine program.

Measurements on all items were ensured after consultations with a panel of Malaysian experts were carried out. 13 questions were adapted from a research conducted by Kazi and Khandaker which was used to assess knowledge about immunization programs (Kazi & Khandaker, 2020). Participants might choose to answer the knowledge question with 'Yes' or 'No'. On a scale of 'very not confident', 'not confident', 'not sure', 'confident', and 'very confident', eight questions were used to assess elements of confidence connected to the COVID-19 vaccination campaign. The inquiry sought to ascertain people's level of trust in NIP.

The general public's level of trust was also analysed in order to determine their acceptability of the vaccination program. There were eleven questions with levels of doubt ranging from 'highly doubtful', 'doubtful', 'not sure', 'confident' and 'highly confident'. Ten questions about people's attitudes toward vaccine-related phenomena, concerns and implementation techniques were scored on a five-point scale: 'strongly disagree', 'disagree', 'not sure', 'agree' and 'strongly agree' (Cerada & Garcia 2021).

STATISTICAL ANALYSIS

This study's data were analysed using the 26th version of Statistical Package for the Social Sciences (SPSS). For demographic data, some analytical methods included frequency and percentage. Descriptive analysis was used to explain related

knowledge, beliefs, uncertainties and points of view. A one-way ANOVA test analysis was done to check for variations connected to reaction. Effect sizes of ANOVA test at the statistical significance level was set at $p < .01$.

RESULT

RESPONDENTS' SOCIO DEMOGRAPHIC PROFILES

This study was made possible by the participation of 363 persons who shared their thoughts about NIP. The demographic information of the respondents is shown in Table 1. The bulk of responses were 237 in

total of women and 126 men. The respondents' age span in this study was from 18 to 58 years old and above. The respondents aged 18-22 years accounted for 38.8 % of the total while the same number of respondents belonged to the age groups of 38-42 and 43-47 years old with 23 respondents (6.3%). In terms of education, the level of undergraduate education was the highest at 66.4%. The second highest degree of education was a skills certificate/ diploma, which accounted for 15.7%. As for employment, the respondents were among the unemployed, including students which was the highest group of respondents at 50.4%. Meanwhile, government employees were at 22.0%. Traders/entrepreneurs accounted for 4.7% of all the employed respondents.

TABLE 1. Respondents' demographic information (n = 363)

Characteristics		Frequency	Percentage
Gender	Male	126	34.7
	Female	237	65.3
Ages	18 - 22 Years Old	141	38.8
	23 - 27 Years Old	50	13.8
	28 - 32 Years Old	29	8.0
	33 - 37 Years Old	42	11.6
	38 - 42 Years Old	23	6.3
	43 - 47 Years Old	23	6.3
	48 - 52 Years Old	26	7.2
	53 - 57 Years Old	14	3.9
Education Levels	Does not go to school	2	0.6
	Primary School	1	0.3
	Secondary School	25	6.9
	Certificate of Skills/Diploma	57	15.7
	Bachelor's Degree	241	66.4
	Master's Degree	25	6.9
	PhD/EdD	12	3.3
Occupations	Unemployed/Student	183	50.4
	Government/Employee	80	22.0
	Private Employee	45	12.4
	Self-employed	20	5.5
	Entrepreneur/Trader	17	4.7
	Others	18	5.0

KNOWLEDGE OF NIP

All respondents were aware of the government’s NIP initiative to combat the COVID-19 outbreak. The respondents learned about NIP through a number of sources, including family members (10), mainstream media such as newspaper, radio and television (145), social media (up to 199), health officials (7) and acquaintances (2). In terms of vaccine shots, the majority of 189 respondents had not received or were currently waiting for their turn. Meanwhile, 92 respondents had received one injection and 82 had completed two. A total of 339 respondents agreed with NIP while 24 respondents disagreed. The followings are some of the reasons from respondents who disagreed: “dubious, the involvement of bad politicians, unsafe vaccines, many other methods, a lot of evidences of adverse effects, there is the interest of certain parties”; “Vaccines do not save us from COVID-19”; “Because there are cheap and safe alternatives”, “still in the clinical study stage and not yet approved for use by the FDA, only approved for Emergency Use Authorization (EUA) use”.

THE DIFFERENCE OF CITIZENS’ CONFIDENCE LEVEL TOWARDS NIP BETWEEN OCCUPATIONS

Table 3 is the one-way ANOVA test of the citizens’ confidence level based on occupation. The findings showed that there was a significant difference of citizens’ confidence level in terms of occupation with the F value (5, 357)=3.498<.01. The indications for the value of standard deviation are as follows: low (1 - 2.339), middle (2.34 - 3.669), high (3.67 - 5). The result of Turkey test analysis also showed a significant difference between working respondents or students, with private workers, $p<.05$. Moreover, the difference in terms of the mean score for confidence level according to occupation in which the respondent is unemployed or student is much higher (M=3.86, SD=.98) compared to the respondents working in government sector (M=3.68, SD=1.02), private worker (M=3.37, SD=1.06), self-employed (M=3.27, SD=.91), seller or entrepreneur (M=3.36, SD=.90) and other occupation (M=3.31,SD =1.20).

TABLE 2. Distribution of citizens’ confidence level based on occupation

Occupation	Number	Mean Score	Std Deviation
Unemployed/Student	183	3.857	.97796
Government Servant	80	3.677	1.01501
Private Worker	45	3.372	1.06116
Self-employed	20	3.269	.91071
Seller/Entrepreneur	17	3.360	.89692
Others	18	3.313	1.20450
Total	363	3.675	1.01896

TABLE 3. ANOVA Test on citizens’ confidence level based on occupation

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	17.553	5	3.511	3.498	.004
In group	358.304	357	1.004		
Total	375.857	362			

THE DIFFERENCE OF CITIZENS’ CONFIDENCE LEVEL TOWARDS NIP BETWEEN EDUCATION LEVEL

One-way ANOVA test to compare the confidence level of the citizens regarding NIP based on education level is shown in Table 5. The mean score for the confidence level of citizens is different

among unschooled respondents (M=3.81, SD=.44), primary school level (M=3.50), secondary school level (M=3.60, SD=.90), certificate or diploma level (M=3.30, SD=1.09), bachelor’s degree level (M=3.81, SD=.96), master’s degree level (M=3.31, SD=1.16) and PhD or EdD level respondents (M=3.58, SD=1.31).

TABLE 4. Distribution of citizens' confidence level based on education level

Education Level	Number	Mean Score	Std Deviation
Unschooler	2	3.813	.44194
Primary School Level	1	3.500	
Secondary School Level	25	3.595	.89579
Certificate / Diploma Level	57	3.303	1.08561
Bachelor's Degree Level	241	3.813	.96401
Master's Degree Level	25	3.310	1.16207
PhD/ EdD Level	12	3.583	1.30812
Total	363	3.675	1.01896

TABLE 5. ANOVA Test on citizens' confidence level based on education level

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	16.137	6	2.689	2.662	.015
In group	359.720	356	1.010		
Total	375.857	362			

THE DIFFERENCE OF CITIZENS' DOUBT REGARDING NIP BETWEEN OCCUPATIONS

One-way ANOVA test to compare the level of doubt of the citizens towards NIP based on the types of occupation is shown in Table 7. The mean score for the level of doubt of the citizens is different among

unemployed respondents or students (M=3.50, SD=.81), government servant (M=3.26, SD=.84), private worker (M=3.02, SD=.76), self-employed (M=3.08, SD=.68), seller or entrepreneur (M=2.67, SD=.63) and other occupations of the respondents (M=2.93, SD=.92).

TABLE 6. Distribution of citizens' level of doubt based on occupation

Occupation	Number	Mean Score	Std Deviation
Unemployed/Student	183	3.493	.80997
Government Servant	80	3.260	.84158
Private Worker	45	3.016	.76335
Self-Employed	20	3.080	.68102
Seller/Entrepreneur	17	2.671	.65361
Others	18	2.928	.91575
Total	363	3.293	.83377

TABLE 7. ANOVA Test of citizens' level of doubt based on occupation

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between Groups	20.758	5	4.152	6.419	.000
In group	230.895	357	.647		
Total	251.653	362			

THE DIFFERENCE OF CITIZENS' LEVEL OF DOUBT REGARDING NIP BETWEEN AGE LEVEL

One-way ANOVA test shown in Table 9 is to compare the level of citizens' doubt towards NIP based on age level. The mean score for citizens' level of doubt is different among the respondents of age 18-22 (M=3.54, SD=.82), 23-27 years old (M=3.26, SD=.71), 28-32 years old (M=3.02, SD=.73), 33-37 years old (M=3.05, SD=.73), 38-42 years old (M=3.17, SD=.95), 43-47 years old (M=3.14,

SD=.80), 48-52 years old (M=3.24, SD=1.00), 53-57 years old (M=3.09, SD=.94) and the respondents of age 58 and above (M=2.98, SD=.79). The result showed that the level of doubt among the citizens between all age levels had a significant difference $F(8, 354)=3.104<.01$. The result of Turkey test analysis showed a significant difference between the respondents of age 18-22 years old with the respondents of age 28-32, and 33-37, $p<.05$. This clearly shows that the level of doubt of the citizens towards NIP is different according to age level.

TABLE 8. Distribution of citizens' level of doubt based on age level

Age	Number	Mean Score	Std Deviation
18 – 22 Years	141	3.543	.82204
23 – 27 Years	50	3.260	.70711
28 – 32 Years	29	3.017	.72657
33 – 37 Years	42	3.052	.73193
38 – 42 Years	23	3.170	.94505
43 – 47 Years	23	3.144	.80330
48 – 52 Years	26	3.235	1.00397
53 – 57 Years	14	3.086	.93797
58 Years and above	15	2.980	.79391
Total	363	3.293	.83377

TABLE 9. ANOVA Test on citizens' level of doubt based on age level

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	16.497	8	2.062	3.104	.002
In group	235.156	354	.664		
Total	251.653	362			

THE DIFFERENCE OF CITIZENS' VIEW REGARDING NIP BETWEEN OCCUPATIONS

Table 11 is a one-way ANOVA test regarding citizens' view about NIP based on occupation. The results found that there was a significant difference of citizens' view based on occupation with the F value $(5, 357)=7.709<.01$. Moreover, the difference in terms of the mean score of citizens' view based on occupation in which unemployed respondents

or students was much higher (M=3.98, SD=.60) compared to the respondents working as government servants (M=3.77, SD=.66), private worker (M=3.60, SD=.71), seller or entrepreneur (M=3.35, SD=.84) and other occupations (M=3.51, SD=1.06). Turkey test analysis showed a significant difference between unemployed respondents or students, with private workers, self-employed respondents and seller or entrepreneur which was $p<.01$.

TABLE 10. Distribution of citizens' view based on occupation

Occupation	Number	Mean Score	Std Deviation
Unemployed/Student	183	3.979	.59569
Government Servant	80	3.766	.65853
Private Worker	45	3.598	.71207
Self-Employed	20	3.315	.70954
Seller/Entrepreneur	17	3.353	.84418
Others	18	3.511	1.06046
Total	363	3.796	.70249

TABLE 11. ANOVA Test on citizens' opinion based on occupation

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	17.408	5	3.482	7.709	.000
In group	161.235	357	.452		
Total	178.644	362			

THE DIFFERENCE OF CITIZENS' VIEW
REGARDING NIP BETWEEN
EDUCATIONAL LEVEL

A one-way ANOVA Test to compare the views of the citizens regarding NIP according to education level is shown in Table 13. The mean score for citizens' view is different between unschooled respondents (M=3.70, SD=.42), respondents of primary school level (M=3.60), secondary school (M=3.74,

SD=.74), certificate or diploma (M=3.64, SD=.72), bachelor's degree (M=3.89, SD=.62), master's degree (M=3.44, SD=.87) and PhD or EdD level (M=3.53, SD=1.25). The findings also showed that the views of the citizens between all education levels have a significant difference $F(6, 356)=2.627<.05$. It was clearly shown that the opinions of the citizens towards NIP are different according to education level.

TABLE 12. Distribution of citizens' view based on education level

Education Level	Number	Mean Score	Std Deviation
Unschooled	2	3.700	.42426
Primary School Level	1	3.600	
Secondary School Level	25	3.744	.74335
Certificate / Diploma Level	57	3.639	.72229
Bachelor's Degree Level	241	3.890	.62278
Master's Degree Level	25	3.444	.87230
PhD/ EdD Level	12	3.533	1.24560
Total	363	3.796	.70249

TABLE 13. ANOVA Test on citizens' view based on education level

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	7.575	6	1.262	2.627	.017
In group	171.069	356	.481		
Total	178.644	362			

THE DIFFERENCE OF CITIZENS' VIEW
REGARDING NIP BETWEEN AGE LEVEL

Table 15 shows the One-Way ANOVA test regarding NIP according to age level. The research outcome found that there was a significant difference of citizens' view with age level with the F value $(8, 354)=3.234<.01$. The outcome of Turkey test analysis also showed a significant difference between the respondents of age 18-22 and the respondents of age 38-42, which was $p<.01$. Moreover, the difference

in terms of the mean score of citizens' view based on age level in which the respondents of age 18-22 was much higher (M=4.00, SD=.61) compared to the respondents of age 23-27 (M=3.80, SD=.52), 28-32 years old (M=3.65, SD=.80), 33-37 years old (M=3.66, SD=.55), 38-42 years old (M=3.44, SD=1.04), 43-47 years old (M=3.62, SD=.75), 48-52 years old (M=3.66, SD=.90), 53-57 years old (M=3.57, SD=.78) and the respondents of age 58 and above (M=3.80, SD=.71).

TABLE 14. Distribution of citizens' view based on age level

Age	Number	Mean Score	Std Deviation
18 – 22 Years	141	4.000	.60945
23 – 27 Years	50	3.798	.51725
28 – 32 Years	29	3.648	.79849
33 – 37 Years	42	3.664	.54942
38 – 42 Years	23	3.435	1.03950
43 – 47 Years	23	3.617	.74569
48 – 52 Years	26	3.658	.90207
53 – 57 Years	14	3.571	.77502
58 Years and above	15	3.800	.70610
Total	363	3.796	.70249

TABLE 15. ANOVA Test on citizens' view based on age level

	Total Square	Degrees of Freedom	Mean Square	F Value	Sig
Between groups	12.168	8	1.521	3.234	.001
In group	166.476	354	.470		
Total	178.644	362			

DISCUSSION

The reactions towards the acceptance and declination of vaccine in Malaysia particularly have a relationship with sociodemographic background of the citizens in this country. The roles of education level, age and occupation are deemed as justifying towards the decision made by the respondents whether to accept or to decline the vaccination program at national level. The level of education plays an important role in relation to knowledge about COVID-19 and awareness to receive a vaccine injection. Although there are professionals who reject vaccinations promoted on social media, this group is not so dominant. This statement is aligned with the research findings that the higher the education level, the higher is the confidence towards COVID-19 vaccination whereas those who live with high risk group family members also have such awareness of the importance of getting the COVID-19 vaccination (Nurul Azmawati 2021). This situation is closely related with the factor of knowledge that one has whether through reading or discussion regarding the vaccination on social media.

Campaigns are carried out in various ways to give an understanding of the function of vaccination during a pandemic so that the vaccination rate increases over time. This is also played by people who tell about the vaccination situation in various countries through sharing on twitter and Facebook. Apart from that, as people get older, they are more

exposed to one issue or new thing. Therefore, for adult respondents, they have more confidence to get vaccination and encourage their family members to also get vaccinated. During this time, children are also given exposure to receive vaccine jab, especially in Malaysia with the existence of the NIPKids program. The confidence in the importance of vaccination is enhanced by their belief that through vaccination, the spread of virus can be reduced and it can avoid from worse risk if one is infected with COVID-19 virus (Biasio et al. 2021).

In the context of COVID-19 vaccination distribution at national level through NIP program, the survey outcome found that there is a doubt regarding NIP based on age level. In this survey, there are young people (23-27 years old) who seem to doubt vaccination may be due to their simplistic view of vaccination. Moreover, youth usually have a healthy body therefore it leads to the perception that there is no necessity to take COVID-19 vaccine (Al-Mulla et al. 2021) Besides, there is a thought that there exists a conspiracy towards the manufacturing and intake of vaccination and there is a lack of trust towards the authority which also contributes to the doubt on vaccine intake (Lindholt et al. 2021). The doubt on vaccination status and the ingredients used in vaccine manufacturing as well contributes to the doubt in vaccine acceptance among the respondents. Such lack of confidence happens to all vaccines that have ever been produced; in fact, it exists among medical practitioners too (Savas & Tanriverdi 2010). In terms of work experience, it also influences the

rate of acceptance of COVID-19 vaccination. Those who work in health sector particularly are exposed to high awareness on the necessity to get vaccinated (Di Martino et al. 2020).

The business sector does not miss out on promoting its employees who are fully vaccinated so that the economy can be opened immediately. The culture of gathering after work hours and festivals caused people to receive vaccinations. This situation finally opened the eyes of many people to receive the vaccine even though there are pro-vaccine and antivaccine groups on social media. In addition, the political agenda also causes vaccination to gain the attention of the people, especially in relation to foreign countries and within the country itself. Workers in affected sectors such as traveling, hotel and business sectors have confidence towards NIP. This is supported by the necessity for a herd immunity and the hope that the situation will be back to normal. For those who are unemployed or student, the perception towards vaccine is highly influenced by social media that it affects the NIP program. Government through the Ministry of Health played a role as a stakeholder because they provided the vaccination programme. But to make sure this programme is successful they need to identify others stakeholders such as the public leader, employer, education system and social media to spread the benefits of vaccination and why it is important to have it. If all the stakeholders take an accountability and working together, the numbers of Malaysian take the vaccine may be increasing later on. With the virus keep on mutating, the need of vaccination development to combating the new virus is needed worldwide.

CONCLUSION

Vaccination is important because most countries that implement vaccination to combat COVID-19 have shown declination in cases and number of deaths. Vaccination program does not only fix the situation, in fact it could help the body to withstand against infection that is much worse if one is infected despite the occurrence of death following vaccination. Hence, all layers of society should realize that the need for vaccine does not only protect oneself but other surrounding people. Regardless of the occupation, education and age, the emphasis on the importance of public health should be made further.

Based on the research carried out, a few in-depth research shall be made to know other factors than

occupation, education and age that can contribute to negative reaction towards government policy particularly public health policy. Government agencies such as local authorities can promote special exposure to local residents, especially about aspects of epidemic prevention in regular programs. It is so that government policies related to public welfare can be achieved. Moreover, research regarding the best method to explain on public health especially vaccine-related needs to be implemented to help the government in the future to conduct health program that receives cooperation at all levels.

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