

Satisfaction among Thai people who got vaccinated against COVID-19: A study within Sripatum Vaccination Center, Bangkok, Thailand

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Abstract: COVID-19 is an emerging disease. Vaccination is a way to control mortality and morbidity from this disease. Thailand is one of the countries that has begun to actively mobilize and encourage vaccination to build community immunity among people. But the vaccine is relatively new, causing people to have a lot of anxiety about getting it.

Purpose: to assess level of satisfaction among people who got vaccinated against COVID-19, to assess level of COVID-19 related knowledge and to study factors affect level of satisfaction of getting COVID-19 vaccine

Methodology: In July 2021, all students from Thai people who got vaccinated against COVID-19 within Sripatum Vaccination Center, Bangkok, Thailand were invited to participate in completing an online questionnaire. A total of 1,000 students participated, level of satisfaction among people who got vaccinated against COVID-19, to assess level of COVID-19 related knowledge and to study factors affecting level of satisfaction of getting COVID-19 vaccine were assessed. Differences between outcomes and sociodemographics were analyzed through independent t-tests and the ANOVA. A generalized linear model was calculated to determine the predictive variables of level of satisfaction.

Findings: A total of 1,000 participants revealed the level of satisfaction of getting vaccinated against COVID-19 was at a high level ($M = 4.54$, $SD = 0.78$). Most participants had a moderate level of COVID-19 related knowledge ($M = 6.86$, $SD = 1.21$). Age ($Beta = .220$, $p < 0.01$) and Monthly Income ($Beta = .088$, $p < 0.05$) were predictive factors for satisfaction of getting COVID-19 vaccination.

Conclusion: Most participants revealed a high level of satisfaction of getting vaccinated against COVID-19. Most participants indicated a moderate level of COVID-19 related knowledge. Common reasons for satisfaction were protection against COVID-19 and employment reasons.

Keywords: Satisfaction on COVID-19 vaccination, Thai adults, COVID-19 vaccine.

1. INTRODUCTION

Covid-19 came from the English language that COVID-19, which stood for Coronavirus disease 2019 or Coronavirus disease 2019, popularly known as COVID-19 or COVID-19, has been declared by the World Health Organization (WHO) on February 12, 2020, officially knew as Severe acute respiratory syndrome Coronavirus 2, or SARS-CoV-2, is a group of viruses that can cause respiratory disease in humans. [1], [2] The disease first spread in Wuhan, Hubei Province, People's Republic of China in late 2019. The origin of the disease was thought to be caused by a mammalian virus such as bats that mediate the outbreak to humans.[3] China has called the disease novel Coronavirus pneumonia, and it was found to be caused by a virus that has mutated from four of the original Coronavirus strains that cause the common cold and was harmless. Because this disease has been around for a long time until people were immune. While some strains could cause severe symptoms of pneumonia, for example, Middle East respiratory viral infections such as SARS in China in 2003

were seen or palm civets, mediated the outbreak of MERS and MERS in Saudi Arabia in 2012. Camel was mediated in the outbreak, while COVID-19 is a severe infectious disease. Because there is no immunity to this new strain of virus [4] causing the current outbreak to spread more and more widely around the world. The latest global total of 178 million COVID-19 cases, 3.84 million deaths, approximately 2,472 million doses of COVID vaccinations (as of June 18, 2021) [5].

The situation of the COVID-19 outbreak in Thailand The outbreak occurred around the beginning of 2019, causing a lot of fear and anxiety. Because it was the first outbreak and an emerging disease, the government and the Ministry of Public Health have controlled and prevented the spread of this infectious disease, including wearing a mask, washing hands, and keeping a distance of at least 2 meters [6]. The COVID-19 vaccine was considered an alternative way to prevent this disease as well, by building immunity in the body. When the body was immune to disease, then there will be a response to that kind of pathogen. The symptoms that occur afterwards may be relieved or asymptomatic at the next infection. Until finally, a vaccine for Covid-19 was invented and produced successfully. Vaccination was distributed around the world to people. But the vaccine being produced was relatively new. It has been proven and tested for more than a year after the outbreak of this epidemic. This has caused the general public to panic and worry about the safety of the various side effects and the long-term consequences after the Coronavirus vaccination. This was due to the fact that most people take the disease very seriously and have received information about the side effects that occur after vaccination that there were many symptoms ranging from mild symptoms to death. Causing people to be very afraid and worried about this type of vaccination was the only way to create group immunity for all people, making it possible to cope and get through this situation quickly. Currently, the total number of COVID-19 cases in Thailand was about 210,782, with 1,577 deaths. [5] Approximately 7 million doses have been vaccinated against COVID-19 (Information as of June 18, 2021) [7].

From the aforementioned issues, the organizers were aware of the importance of vaccinating against COVID-19 that requires cooperation between all agencies and the people's sector. The author was therefore interested in studying level of Satisfaction among Thai people who got vaccinated against COVID-19 Thailand and researching the factors influencing level of satisfaction from getting COVID-19 vaccine.

2. METHODS

Participants and procedure

This was a cross-sectional observational study. An online questionnaire was purposely developed and available through Google From between 22 July 2021 to 30 July 2021. All Thai adults who got vaccinated against COVID-19 at Sripatum University COVID-19 vaccine service center were eligible (for this study) and were invited to participate in the study. The invitation was sent by hand to each participant for scanning the QR Code to access the survey. The Thai adults who got vaccinated against COVID-19 at Sripatum University COVID-19 vaccine service center have access to google form, so they all receive an invitation. In this invitation, information about the objectives of the study as well as the ethical guarantee of confidentiality and anonymity in the data collected as stated in the informed consent were explained. Participation was completely free and voluntary, and no personal data were collected from any participant. Of the 6,500 Thai adults who got vaccinated against COVID-19 at Sripatum University COVID-19 vaccine service center (22 July 2021 to 28 July 2021), a total of 1,000 Thai adults who got vaccinated against COVID-19 at Sripatum University COVID-19 vaccine service center in the study (response rate: 100 %).

Instrument

The questionnaire was developed based on a literature review including (1) [COVID - 19 its transmission, symptoms, Treatment, Prevention, COVID - 19 vaccine information from WHO and CDC] (2) studies performed on the same topic were several common items were used to assess each of the dimensions analyzed in this study. The proposed items were then grouped and redundant items were removed. A preliminary version of the instrument was reviewed by three experts to validate its content. A pretest was then performed with a small sample to test Thai adults who got vaccinated against COVID-19 in Thailand for comprehension and difficulty. All the questions remained without modifications. The psychometric characteristics of the questionnaire were tested, as described in the statistical analysis subsection. The final version of the questionnaire contained 22 questions; 10 about sociodemographic characteristics (gender, age, congenital disease, living arrangement, educational level, occupation, monthly income, having a COVID-19 insurance , had a shot of an influenza vaccine and be close to people who are sick with COVID-19). And 12 items divided into 3 sections.

Knowledge about COVID-19: this scale consisted of 9 questions related to COVID-19, (its origin, transmission, screening for COVID-19, contracting COVID-19, symptoms, treatment, prevention and vaccine. The participants were asked to choose the correct answer from multiple choices. One point was assigned to each correct answer, while providing an incorrect answer received zero points. The sum of all items was made hence higher scores corresponded to a higher level of knowledge. Cronbach's alpha for the scale calculated with the sample of this study was acceptable ($\alpha = 0.529$).

Reason to get Vaccinated: this scale was composed of 1 item. The participants were asked "Which of the following was your reason for getting vaccinated against COVID-19? The participant can choose more than 1 answer. The coefficient of internal consistency was acceptable ($\alpha = 0.556$).

Satisfaction from getting vaccinated against COVID-19: this scale referred to the level of satisfaction from getting vaccinated against COVID-19, included 1 item. The participants were asked "How much are you satisfied with getting COVID-19 vaccinated?" The data analysis reports to 1 item. The item was answered using a five-point scale (From 1-least to 5-the most), with one point assigned to each satisfaction from getting vaccinated against COVID-19. A high score on this scale indicated a high level of satisfaction from getting vaccinated against COVID-19, ranging from 1 to 5. The internal consistency of the scale was $\alpha = 0.556$

Statistical analysis

The analysis was performed using SPSS for windows, version 26. To analyse psychometric characteristics of the scales, an exploratory factor analysis, using principal component analysis with varimax rotation, was carried out. Reliability was analyzed through the calculation of item-total correlation coefficients and Cronbach's alpha (α) for the scales of the questionnaire. The descriptive analysis were presented in absolute (n) and relative (%) frequencies, mean (M) and standard deviations (SD). To assess the differences between the outcome variables (knowledge about COVID-19, reason to get vaccinated, concern to get vaccinated and satisfaction from getting vaccinated against COVID-19) and the sociodemographic characteristics, considering the sample size, independent t-test and the ANOVA were used as appropriate. The correlations between the outcomes of the study were calculated by Pearson's correlation. Lastly, a generalized linear model was calculated to determine the predictive variables of the preventive behaviors. Exp (β) and the respective 95% confidence intervals (95% IC) were presented. Statistical significance was defined as $p < 0.05$.

Ethical Considerations

This research uses an anonymous data collection method to collect data from Thai adults who got vaccinated against COVID-19 at Sripatum University COVID-19 vaccine service center, Bangkok, Thailand, by using Google form. The invitation was sent by researcher to the participants. In these invitations, information about the study's objectives and the ethical guarantee of confidentiality and anonymity in the data collected as stated in the informed consent was explained. Participation was completely free and voluntary, and no personal data were collected from any participant.

3. RESULT

This study comprised a total of 1,000 participants. The sociodemographic characteristics of the sample are presented in Table 1. Most participants were female (n = 576, 57.60 %). Most participants age's were 30-40 (n = 351, 35.10 %) followed by < 30 years of age group (n = 338, 33.80 %) and 41-50 years of age group (n = 218, 21.8 %) respectively. Most participants had no congenital disease (n = 754, 75.40%), lived with family with children or senior (n = 409, 40.90%) followed by participants who lived with family without children or senior (n = 416, 41.60%). 532 (53.2%) of the participants graduated with a bachelor degree while the rest graduated high school (n = 374, 37.4%). Most participants were health care workers / government official / office worker group (n = 546, 54.6 %) and earned monthly income below 20000 Bath (n = 540, 54.00%). Most participants had COVID-19 Insurance (n = 531, 53.1%), had no shot of an influenza vaccine (n = 746, 74.6 %) and were close to people who are sick with COVID-19 (n = 929, 92.9%).

Regarding knowledge about COVID-19, participants revealed moderate knowledge about COVID-19, correctly answering a mean of 6.86 (SD = 1.21) questions in a total of 9. Females showed higher knowledge scores (M = 6.95, SD = 1.12) than male participants (M = 6.73, SD = 1.32). Age group of 30 – 40 years showed the highest COVID-19 related knowledge score of 7.04 (SD = 1.12). Participants who had no congenital disease showed the highest COVID-19 related knowledge score of 6.98 (SD = 1.12). The living alone had the highest COVID-19 related knowledge score of 6.98 (SD = 1.22). Participants who attained master's degree or above showed the highest COVID-19 related knowledge score of 7.10 (SD = 1.11). Health care workers or government officials or office worker groups showed the highest COVID-19 related

knowledge score of 6.92 (SD = 1.22). For the income group, participants who earn monthly more than 40,000 Bath had the highest COVID-19 related knowledge score of 7.05 (SD = 0.95). Participants who had COVID-19 insurance, had a shot of an influenza vaccine and be close to people who are sick with COVID-19 had the highest COVID-19 related knowledge score of 7.03 (SD = 1.08), 6.99 (SD = 1.15) and 6.90 (SD = 1.14) respectively.

Participants showed a good level of satisfaction of getting vaccinated against COVID-19 with the average score of 4.54 from 5 full scores (SD = 0.78). Females showed higher satisfaction levels (M = 4.56, SD = 0.75) than male participants (M = 4.50, SD = 0.82). Age groups more than 50 years showed the highest COVID-19 related satisfaction levels of 4.82 (SD = 0.64). Participants who had no congenital disease showed the highest COVID-19 related satisfaction levels of 4.55 (SD = 0.76). The living with families with children aged below 12 and/or with seniors had the highest COVID-19 related satisfaction levels of 4.56 (SD = 0.75). Participants who attained bachelor's degree showed the highest COVID-19 related satisfaction levels of 4.56 (SD = 0.74). Business owner groups showed the highest COVID-19 related satisfaction levels of 4.71 (SD = 0.67). For the income group, participants who earn monthly more than 40,000 Bath had the highest COVID-19 related satisfaction levels of 4.72 (SD = 0.63). Participants who had COVID-19 Insurance, had no shot of an influenza vaccine and be close to people who are sick with COVID-19 had the highest COVID-19 related satisfaction levels of 4.54 (SD = 0.76) , 4.54 (SD = 0.77) and 4.55 (SD = 0.77) respectively.

Table 1: Differences in outcomes according to the sociodemographic characteristics of participants (N = 1,000).

	n (%)	Knowledge about COVID-19 (Range 0-9)	Satisfaction from getting vaccinated against COVID-19 (Range 1-5)
Sociodemographic characteristics		M (SD)	M (SD)
Gender			
Male	424 (42.4)	6.73 (1.32)	4.50 (0.82)
Female	576 (57.6)	6.95 (1.12)	4.56 (0.75)
Age			
< 30	338 (33.8)	6.70 (1.40)	4.31 (0.92)
31-40	351 (35.1)	7.04 (1.12)	4.54 (0.75)
41-50	218 (21.8)	6.88 (1.04)	4.76 (0.51)
> 50	93 (9.3)	6.69 (1.12)	4.82 (0.64)
Having Congenital Disease			
No	754 (75.4)	6.82 (1.24)	4.55 (0.76)
Yes	246 (24.6)	6.98 (1.12)	4.48 (0.87)
Living Arrangement			
Alone	175 (17.5)	6.98 (1.22)	4.47 (0.86)
Family with children aged below 12 and/or with senior	409 (40.9)	6.88 (1.17)	4.56 (0.75)
Family without children aged below 12 and/or without senior	416 (41.6)	6.78 (1.26)	4.54 (0.79)
Educational level			
High School	374 (37.4)	6.54 (1.29)	4.50 (0.80)
Bachelor's degree	532 (53.2)	7.04 (1.13)	4.56 (0.74)
Master's degree or above	94 (9.4)	7.10 (1.11)	4.54 (0.96)
Occupation			
Health care workers / Government officials / Office workers	546 (54.6)	6.92 (1.22)	4.50 (0.78)
Teacher / Student	111 (11.1)	6.83 (1.24)	4.41 (0.96)
Business owner	94 (9.4)	6.87 (1.05)	4.71 (0.67)
General Employee / Freelance / Farmer and Others	249 (24.9)	6.71 (1.25)	4.60 (0.74)
Monthly Income			
Less than 20,000	540 (54)	6.72 (1.32)	4.42 (0.88)
20,001 - 40,000	353 (35.3)	7.01 (1.10)	4.65 (0.63)
More than 40,000	107 (10.7)	7.05 (0.95)	4.72 (0.63)
Having a COVID-19 insurance			
No	469 (46.9)	6.66 (1.33)	4.53 (0.81)
Yes	531 (53.1)	7.03 (1.08)	4.54 (0.76)

Had a shot of an influenza vaccine			
No	746 (74.6)	6.81 (1.24)	4.54 (0.77)
Yes	254 (25.4)	6.99 (1.15)	4.53 (0.82)
Be close to people who are sick with COVID-19			
No	929 (92.9)	6.85 (1.22)	4.55 (0.77)
Yes	71 (7.1)	6.90 (1.14)	4.32 (0.95)
Total	1,000 (100)	6.86 (1.21)	4.54 (0.78)

Reason to get vaccinated COVID 19 showed the highest participants answer were to protect against COVID-19 such as risk group, had congenital disease, fear of contracting COVID 19 (n = 713, 71.30 %) followed by participants answer were employer such as values, campaigns, policies at work, family and friends (n = 571, 57.10 %).

Table 2: The reasons to get vaccinated COVID 19 of participants (N = 1,000).

Reasons to get Vaccinated	
1. To protect against COVID-19	713 (71.30)
2. Employer	571 (57.10)
3. Financial risk associated, if contracting COVID-19	360 (36.00)
4. Trust in vaccine	430 (43.00)
5. Confidence in the government handling the pandemic	211 (21.10)

Results from the generalized linear model indicated that the age (Beta = .220, p<0.01) and monthly income (Beta = .088, p<0.05) had a statistically significant effect on the level of satisfaction from getting vaccinated against COVID-19 adopted.

Table 3: Generalized linear model predicting satisfaction among Thai people who got vaccinated against COVID-19 : A study within Sripatum Vaccination Center, Bangkok, Thailand.

	B	SE	EXP (β)	Sig	95% CI	
					Lower	Upper
Gender	0.045	0.05	0.028	0.367	-0.053	0.142
Age	0.18	0.029	0.22	0	0.124	0.236
Having Congenital Disease	-0.173	0.057	-0.095	0.003	-0.285	-0.06
Living Arrangement	0.01	0.033	0.009	0.768	-0.055	0.075
Highest degree completed	-0.036	0.044	-0.028	0.417	-0.121	0.05
Occupation	0.019	0.02	0.031	0.338	-0.02	0.057
Monthly Income	0.101	0.042	0.088	0.017	0.018	0.184
COVID-19 Insurance	-0.026	0.05	-0.016	0.606	-0.124	0.072
Had a flu vaccine before	-0.051	0.057	-0.028	0.373	-0.163	0.061
Contract COVID-19	-0.183	0.094	-0.06	0.052	-0.367	0.002
Knowledge about COVID-19	0.013	0.02	0.021	0.514	-0.027	0.053

Concern over getting vaccinated against COVID-19 among the participants showed the highest participants answer were unforeseen (both short term and long term) such as side effects, severe vaccine allergy (shock, death, disable), efficiency, age group that is safe for that type of vaccine (n = 134, 71.28 %) followed by participants answer were Personal reasons such as not convenient to travel to get vaccinated; having congenital disease, having drug allergy, fear of pain, fear of needle and fear of contracting COVID-19 from the vaccination center (n = 33, 17.55 %).

Table 4: Concern over getting vaccinated against COVID-19 among the participants (N = 1,000).

Concern over getting vaccinated against COVID-19		N=188, (100%)
1	Concerned on unforeseen (both short term and long term) such as side effects, severe vaccine allergy (shock, death, disable), efficiency, age group that is safe for that type of vaccine	134 (71.28%)
2	Preferred more choices of vaccine than what being provided by the government such as vaccine brand or type, overcrowding of people in vaccination centers	21 (11.17%)
3	Personal reasons such as not convenient to travel to get vaccinated; having congenital disease, having drug allergy, fear of pain, fear of needle and fear of contracting COVID-19 from the vaccination center.	33 (17.55%)

4. DISCUSSION

This study was conducted at Sripatum Vaccination Center, Bangkok, Thailand, a total of 1,000 responses were received during 22 - 28 July 2021, counted as 100% responses. Most participants showed a good level of satisfaction getting vaccinated against COVID-19 with the average score of 4.54 (SD = 0.78). Participants who were older had a higher level of satisfaction than the younger ones. Business owners (M=4.71, SD=0.67) and people who earned more than 40,000 per month (M=4.72, SD=0.63) had the highest level of satisfaction. This could be attributed to 1) during the study period, there were high number of covid-19 infected case on the average 20,000 (22 - 28 July 21), this could make people aware of contracting COVID-19 therefore they wanted to get vaccinated and eventually they were one of the early group who got vaccinated and they felt happy. This may be because the current situation with COVID-19 was severe and had a large number of infections. As a result, the number of people infected and dying from COVID-19 increases. Those who received the vaccine may have anxiety and distrust of the COVID-19 vaccine provided by the government. But to survive and be safe from the disease now, besides wearing a mask, washing your hands, and keeping a social distance of at least 2 meters, getting the Covid-19 vaccine is an important choice in this situation. Therefore, the majority of Thai people in Bangkok have turned their attention and were more willing to receive the COVID-19 vaccine, despite fears of side effects from vaccination. But getting vaccinated and building immunity to this disease was better than not getting vaccinated at all. Currently, the vaccine that the government had provided to the people was limited and not enough to meet the needs of everyone across the country. As a result, there were many Thai people in Bangkok who had not received the required vaccine. 2) Administration of Sripatum vaccination center was efficient and effective in accommodating people who came for vaccination. Sripatum University Vaccination Center was a large center. It was convenient to travel because it was close to public transportation such as BTS, with buses passing through and you were able to travel by yourself. There were several parking spots. There were several service points in the building. Each point had several full-time staff. There was systematic management. Make the service more convenient and faster All staff were welcomed with warmth and friendliness. For this reason, more and more people from both the local area and other areas came Sripatum University vaccination Center for vaccination services. Knowledge about COVID-19, participants revealed moderate knowledge about COVID-19, correctly answering a mean of 6.86 (SD = 1.21) questions in a total of 9. Publicity and education about the COVID-19 disease and vaccine had been spread through various media. Because it was an emerging disease and people had more knowledge on how to prevent it. to reduce future morbidity and mortality rates. Responding to the questionnaire due to the time limit As a result, some respondents may not be able to read the questions or answers thoroughly enough, resulting in incorrect answers. Because some questions could be answered with multiple answers. As a result, the average score of knowledge level was moderate. whether it should be at a good level or a very good level. Concerning level of COVID-19 related knowledge, the results indicated moderate level of COVID-19 related knowledge (M=6.86, SD=1.21). Covid-19 was an emerging disease with little study, research and research. However, information about the disease was constantly changing. Whether it was a means of contact, prevention, treatment, there were more and more mutations. Usually, research and trials of a vaccine or medicine of a certain type will have to go through many stages of research and experimentation and over many years to monitor potential side effects of the medication Contraindications to the use of various drugs To make users safe from using drugs as much as possible But the COVID-19 vaccine Through research and experimentation, it took about a year to invent. Each company had its own production method. efficacy in preventing different diseases In an epidemic, it was imperative that the vaccine be vaccinated as quickly and as widely as possible. who have been vaccinated Some had no symptoms at all. Some people experience symptoms following common vaccine side effects, such as fever, muscle aches. Pain at the injection site, etc., but there

were some who had severe symptoms that lead to death. For this reason This caused most of the people to have feared and concerned about receiving the COVID-19 vaccine this time. Top reasons for getting vaccinated were 1) to protect against COVID-19, 2) being told to get COVID-19 vaccinated by their employer, 3) to avoid financial risk associated if contracting COVID-19, 4) having trust in vaccine and 5) confidence in the government in handling the pandemic. Because COVID-19 was an emerging disease. There was also information from the study. Research and experiments on this disease were still not much. It could be transmitted through the respiratory system such as coughing, sneezing, talking, living together, etc., causing everyone to have anxiety and were quite afraid of this disease. followed by participants answer were social such as values, campaigns, policies at work, family and friends (n = 571, 57.10 %) because there were many workplaces that had a policy that all workers must be vaccinated against COVID-19, otherwise they would not be able to come to work in that location. Concerning to get vaccinated Covid 19 showed the highest participants answer were unforeseen (both short term and long term) such as side effects, severe vaccine allergy (shock, death, disable), efficiency, age group that is safe for that type of vaccine (n = 134, 71.28 %) because the vaccine has just been discovered and can be done for a short time. Research or trial period is shorter than a year. Therefore, it is not possible to know the consequences that may occur in the future. as well as the effectiveness in preventing the disease, how much because there are mutations in the disease all the time. This makes it uncertain whether the vaccines already given will protect against emerging strains or not. Some people who have been vaccinated can get COVID-19. followed by participants answer were personal reasons such as not convenient to travel to get vaccinated exemple had a congenital disease, had a history of drug allergy, excitement, fear of pain, fear of needle, fear of contracting Covid 19 for yourself and your family, willingness to come and get vaccinated by myself (n = 33, 17.55 %)

Satisfaction from the COVID-19 vaccine It would be another indication of getting the COVID-19 vaccine for Thai people. Therefore the author conducted analysis on willingness to be vaccinated against COVID-19 studies as there was no prior study on satisfaction on getting COVID-19 vaccination, as to my knowledge. Quyen G. To et al. [8] willingness to vaccinate against COVID-19 declines in Australia, except in Lockdown Areas. The results showed that participants were more willing to vaccinate if the vaccine was safe at survey. Rachael H Dodd et al. [9] Willingness to vaccinate against COVID-19 in Australia. The results showed in Australia, attitudes towards a COVID-19 vaccine appear to be more positive than reported in France in late March, 4 which might in part reflect greater confidence in the government. However, our data show efforts are needed to target vaccine education to those with lower education and health literacy. It remains to be seen whether Australia's high intentions towards vaccine uptake will remain when restrictions are relaxed and the immediate perceived threat diminishes. Bridget J. Kellye et al. [10] study about predictors of willingness to get a COVID-19 vaccine in the U.S. The results showed most respondents were willing to get the vaccine for themselves (75%) or their children (73%). Notably, Black respondents were less willing than White respondents while Hispanic respondents were more willing than White respondents. Females were less likely than males. Those without insurance were less willing than the insured. Willingness to vaccinate was higher for those age 65 and older than for some younger age groups, but other groups at increased risk because of underlying medical conditions or morbid obesity were not more willing to get vaccinated than their lower risk counterparts. The result was different from Roselinde Kessels et al. [11] that conducted a study about Willingness to get vaccinated against COVID-19: profiles and attitudes towards vaccination. The results showed 34% of the participants reported that they will definitely get vaccinated against Covid-19 once a vaccine is available and 39% that they would "probably". Intended uptake was strongly associated with age, opinion on the government's dealing with the Covid-19 pandemic, medical risk and spoken language, and to a lesser extent with gender and having known someone who was hospitalised because of Covid-19. Similar predictors were identified for attitudes to vaccination in general. However, Covid-19 vaccine hesitancy was more marked in age groups below 54 years old. We further analysed a sample of 17% (n=349) of the participants found favourable to vaccination in general but not willing to vaccinate against Covid-19. These people were mainly female, young, French speaking, slightly less educated, and working. They also did not belong to a Covid-19 risk group, were very dissatisfied with the government's dealing with the Covid-19 crisis, and did not personally know someone who was hospitalized because of Covid-19.

Limitation

Participants' intention to be vaccinated was explored during a third COVID-19 wave in Thailand, June-July 2021, when COVID-19 vaccination started rolling out for the first group, aged 18-60 years old in June, but over 60 years old and not severe or stable of congenital disease started in July. The survey was conducted by Google form, only participants with access to the internet could participate in the study. The study on satisfaction about Covid-19 vaccination was none.

5. CONCLUSIONS

A total of 1,000 participants revealed the level of satisfaction of getting vaccinated against COVID-19 was at a high level. Most participants had a moderate level of COVID-19 related knowledge. Age and Monthly Income were predictive factors for satisfaction of getting COVID-19 vaccination. Common reasons for satisfaction were protection against COVID-19 and employment reasons.

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