

GUIDELINES FOR PROTECTING YOURSELF FROM CONTRACTING THE COVID-19 VIRUS OF PEOPLE IN THAILAND

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ABSTRACT

Abstract— This survey research the objective of this study was to study the level of knowledge, attitude and self-protection behavior from COVID-19 infection as well as the relationship with personal factors of people in U-Thong District, Suphanburi Province during the COVID-19 outbreak the sample consisted of 445 people. Data were collected by using a questionnaire on knowledge, attitudes and self-protection behaviors from COVID-19 infection through the LINE application the confidence value was .81 data were analyzed using descriptive statistics and Pearson correlation. The results of the study found that 1. People in U-Thong District Suphanburi province most of them were aged between 30-49 years old, had a bachelor's degree, 46.07%, had a high level of knowledge about COVID-19, 80.70% believed that Thailand will overcome the COVID-19 infectious disease, and 83.40% are confident that the coviral-19 infection will eventually will be controlled 99.80% of the sample group wore a mask when leaving the house. 2. The level of education, knowledge and attitude were positively correlated with self-protection behavior from COVID-19 infection with statistical significance at the .05 level ($r = .10, .18, \text{ and } .16$, respectively) Health personnel can use the study results to promote people's knowledge and can protect themselves from contracting the COVID-19 virus.

Keywords— COVID-19 infection, knowledge, attitude, behavior

INTRODUCTION

The outbreak of the Coronavirus 2019 or COVID-19 (Covid-19) started at the end of 2019 and has spread all over the world causing fear and affecting health society and the economy of the population and at the beginning of January 2020, there was a pandemic (pandemic) which is a rapidly spreading infection around the world. According to the announcement of the World Health Organization on March 11, 2020 (Department of Disease Control Ministry of Public Health 2020). According to statistics as of April 15, 2020 the global population has 1,982,939 cases and 126,761 deaths with the top five countries having the highest infections the United States (609,516) ranks first followed by Spain (174,060), Italy (162,488), Germany (132,362) and France (131,362). The top five countries with the most deaths were the United States (26,057), Italy (21,067), Spain (18,255), France (15,750) and the United Kingdom (12,129), respectively (Dong, Du, & Gardner, 2020) .For the outbreak of the COVID-19 virus first round in Thailand, the first suspected case was found on January 21, 2020 in a 74 year old Chinese female tourist who arrived in Bangkok on a flight from Wuhan capital city of Hubei Province, People's Republic of China and as of April 8, 2020, there were 2,369 infections in Thailand 30 deaths 111 new cases 1,250 in Bangkok and Nonthaburi 101 in the northeastern region Northern region 86 people Central region 332 people and Southern region 409 people (Department of Disease Control Ministry of Public Health, 2020) and from the statistics as of April 22, 2020, Thailand has an outbreak and there are 2,826 people infected with COVID-19, the number of recovered people is 2,352, representing 83.2% of the total. Healing is ranked second in the world after the People's Republic of China (Department of Disease Control Ministry of Public Health, 2020). As for the second outbreak in Thailand Started in late December 2020 by meeting a 67 year old Thai woman, trading at Klang Kung Market, Mahachai Subdistrict, Mueang District, Samut Sakhon Province. Infected with no history of traveling abroad this is believed to be an infection from Myanmar workers in the shrimp market. Which is an area with a densely populated Burmese migrant workers SamutSakhon provincial health officials visited the area for active case finding and found a large number of new asymptomatic cases among Myanmar workers. This second wave of outbreaks is different from the first wave of outbreaks in many aspects. For example, the number of

infected people is greater has spread to many provinces Therefore it is expected that the second round of outbreaks will not go away as quickly as the first round (Surachai Chokkanchitchai, 2020). Even Thailand's disease control system Patients who are infected or at risk of infection are quickly isolated. Including tracking all those who have been exposed to the infection and the infection from the patient can be examined quickly but the epidemic in Thailand is still ongoing and affects the lives of the people because it causes social economic changes and the use of technology These all have an impact on the individual, such as losing a job or being fired. Family members must be separated from each other and social distancing, as well as reduced family and community relationships change the way of life there was a problem of lack of income and daily life that must be adjusted (Bchancha Kerdmanee, Surachai Thammathaweethikul, Yanpinit Wachirasurong, Bodinchat Sukbot, and Sombat Teekasub, 2020). In Thailand the Committee of the Center for The Management of Coronavirus Pandemics has been established 2019 (COVID-19), the Executive Committee of covid-19 The National chaired by the Prime Minister has declared Thailand a state of emergency. It focuses on staying at home, working from home (WFH) maintaining physical distancing, social distancing, wearing face masks and washing their hands frequently (Emergency Operations Center, CDC, Ministry of Public Health, 2020). The declaration of emergency forced people to change their lifestyle altogether. For covid-19 pandemics and infections in Suphanburi province in cooperation with the administration, public health, Kamnan, village elders and public health volunteers are monitoring the area closely and continuously it said it had received a report of an epidemiological investigation. According to Suphanburi provincial public health office, patients confirmed to be infected with COVID-19 in Suphanburi province, the first of which is the first. The patient was exposed to the disease from people returning from abroad and had respiratory illnesses that were later diagnosed with COVID-19 (Suphanburi Provincial Public Health Office, 2020) and on April 24, 2020. Suphanburi province has announced that a person has been infected with covid-19. The sixth case after five previous cases have accumulated and have been cured but it's under surveillance, and one more person has been infected recently the six people who have been infected with covid-19 have been found to be residents of U Thong District, SuphanBuri Province. Therefore, SuphanBuri province has announced a siege of U-Thong district as a vulnerable area for covid-19 as more people become infected and more likely to spread to prevent and control the spread of COVID-19 In SuphanBuri province, the measures of the Ministry of Public Health are effectively in accordance with the measures of the Ministry of Public Health therefore, U-Thong district is designated as a risk area where it is necessary to step up measures to prevent and control the spread of COVID-19 more intense. Suphan Buri province has resolved to impose a ban on the sale of all types of alcoholic beverages food outlets and all kinds of drinks, including shops, stalls, pushcart Fruit panels or other establishments in the same way do not provide a place to eat except Sale for re-eating only at the property. Close all flea markets and places of the same nature banned banquets at ordinations, weddings, funerals. Religious merits, ancestral homages and all kinds of traditions for the practice of organizing such events, comply with the Ministry of Culture announcement on the guidelines regarding the festival. Strict traditions, religious ceremonies and ceremonies and ask the people of U-Thong District not to refrain from traveling outside the area unnecessarily (Suphanburi Provincial Public Health Office, 2020) this announced a risk area and stepped up measures to prevent and control the spread of covid-19 more intense inevitably it affects the people living in the area (Li, Wang, Xue, Zhao, & Zhu, 2020).

According to reviews and related research, there is very little research in Thailand that studies the relationship between knowledge. Attitudes about COVID-19 infection and self-defense behavior from COVID-19 infection with the above-mentioned circumstances and reasons the researchers therefore aim to study the relationship between personal, knowledge and personal factors. Attitudes about COVID-19 infection and self-defense behavior from covid-19 infection by people in U-Thong District, SuphanBuri Province During the impact of the COVID-19 pandemic the results of the study will benefit nurses and healthcare workers in public healthcare to prevent covid-19 infection and provide information to health teams. Be able to prepare for changes in public health care in the future.

LITERATURE & THEORY

Guidelines for taking care of personal hygiene to prevent and reduce the spread of COVID-19

This recommendation is prepared as a practical guideline for both the general public and the general public. The group at high risk of contracting COVID-19 is pregnant women. Young children under 5 years old, the elderly and people with underlying diseases such as diabetes, high blood pressure, cardiovascular disease, respiratory disease, allergies, which are more likely to die than the general public if infected with the COVID-19 virus to protect themselves from illness and reduce the risk of death. Therefore, there are practical guidelines for the prevention of COVID-19. For the general public and risk groups details are as follows.:

1. Leave the house only when necessary. If going outside, keep a distance of at least 1-2 meters from other people, avoid going into crowded, crowded or closed areas.
2. Wear a mask or cloth mask at all times. When away from home.
3. Use public transport only when necessary. and avoid rush hour If you have to stack a motorcycle, you should sit facing sideways
4. Wash your hands often with soap or alcohol gel every time. Before eating, after using the toilet, or after coughing or sneezing, or after touching a vulnerable area shared by users in a public place, such as a lock or a doorknob Handrails or handrails, etc.
5. Avoid touching your face, eyes, mouth, nose unnecessarily.
6. People who are at risk Elderly people over 70 years old, people with chronic diseases such as diabetes, heart disease, high blood pressure, lung disease and children under 5 years old should avoid going out. unless necessary to leave the house as little as possible in the shortest possible time.
7. Separate personal items. Do not share with others.
8. Choose hot or freshly cooked food. should eat separately or if eating together use personal serving spoon. exercise regularly and get enough rest.
9. If returning from a country or an area with an epidemic of COVID-19, should self-isolate at home for 14 days and follow the Ministry of Public Health's instructions
10. Observe symptoms regularly. If you have a cough, sore throat, runny nose, smelly nose, and tongue doesn't taste, go to the nearest hospital for immediate treatment.

Guidelines for high-risk groups

1. Guidance for the elderly and those living with the elderly to the widespread COVID-19 epidemic situation. The elderly are considered people who are at risk of developing severe disease more than other age groups. Living in a family with family members with a history of traveling from high-risk areas May cause the elderly to be infected. Therefore, the elderly and family members should behave. To prevent exposure and spread of germs as follows.

1.1 Advice for the elderly

- Wash your hands often with soap and water or 70% alcohol gel every time before eating. After going to the toilet or when touching things. with others Avoid touching your face, eyes, mouth, nose with your hands.
- Choose hot or freshly cooked food. should eat separately or If eating. Together to use a personal spoon exercise regularly and get enough rest.
- If you cough or sneeze, cover your mouth with a handkerchief or tissue cover your mouth with your elbow and do clean your hands with soap and water or alcohol gel immediately. or to wear a mask avoid staying Close to people who have cold symptoms, fever, cough, sneeze. runny nose.
- Refrain from leaving home or entering crowded areas. If necessary, wear a mask or cloth masks take the least amount of time.
- Keep a distance of 1 - 2 meters from other people, avoid hugging. or talk in close distance with other people and switch to telephone communication or social media.
- If you have a congenital disease such as cardiovascular disease, diabetes, high blood pressure, or chronic obstructive pulmonary disease cancer the elderly at the discretion of the physician if the scheduled examination Please contact for advice from doctor and have relatives take medicine instead.
- Take care of your own mental state not too stressful Find ways to relieve stress, such as exercising. suitable for health (such as Chinese boxing, yoga), listening to music, singing or playing music, planting trees Gardening, room decoration, home decoration, playing with pets, praying, meditating, breathing exercises.

1.2 Advice for those living with the elderly

- Observe yourself, that there is a fever or respiratory symptoms? If found to have such symptoms should refrain from being in close contact with the elderly.
- Avoid unnecessary contact with the elderly. Find a way to build a good relationship by keeping distance from the elderly.
- Those who take care of the elderly Must wear a mask at all times and wash your hands every time before giving care.

2. Advice for people with chronic diseases, diabetes, high blood pressure cardiovascular disease respiratory disease people with underlying diseases such as diabetes, high blood pressure Cardiovascular and cerebrovascular disease and systemic disease Respiratory If infected with COVID-19, there will be a risk of severe illness than the general population. to prevent infection or severe illness Therefore, there are recommendations as follows.

2.1 Advice for patients

- To stay in the residence, avoid close contact with people who are not caregivers. keep the distance between Individuals 1 - 2 meters.
- Refrain from sharing personal belongings or appliances with others.
- There is a contact phone number of the hospital that receives regular treatment.to discuss health problems.
- Contact a regular hospital before the scheduled appointment to acknowledge practices such as giving to relatives or Someone else took the pills instead to pick up medicine near home or transfer to another hospital for examination.
- Take medication regularly. and regular check-ups, such as blood pressure measurements or blood pressure measurements blood sugar at home.
- If you have an emergency, call 1669.

2.2 Advice for close relatives and caregivers

- Wear a mask at all times during the care.
- Wash your hands before and after giving care.
- If you have any symptoms of respiratory system disorders such as runny nose, cough, sore throat, or feel like you have a fever, you must refrain. providing care or stay close Should assign someone else to act instead.
- Cleaning tools or medical equipment that are commonly used together in the home, such as alcohol blood pressure monitor.

METHODS

Population and sampling method

The population in this study were residents and domicile in U-Thong District, province. Suphan Buri from mid-year population data as of June 2020 found that there were 121,961 people (the Public Health Strategy Development Suphan Buri Provincial Public Health Office, 2020). The sample group was people aged 18 years and over, domiciled in U-Thong district, province. Suphanburi does not have any mental health disorders able to speak, read or listen to Thai there are restrictions on keep physical distance and are happy to provide information Calculate sample size using Power analysis. From the program G*power (Faul, Erdfelder, Lang, & Buchner, 2007), select Correlation: Bivariate normal model by setting significance level at .05, power of test at .80 and influence size. (effect size) equal to .15, a total of 343 people were sampled and added samples to replace the information that may have 30 percent missing data, based on similar research by Zhang et al. (2020) received a total sample of 445 people, convenient sampling and snowball sampling.

Research tools

Part 1 General data record forms include gender, age, marital status, educational level. Occupation Average monthly income and having people who are at risk of contracting COVID-19 in the family

Part 2 Questionnaire on knowledge, attitude and self-protection behavior from addiction. A total of 16 COVID-19 viruses developed by Zhong et al. (2020) with the Alpha Cronbach coefficient. Cronbach's alpha

coefficient of the whole questionnaire was .76, the questionnaire was translated into Thai by the researcher, after that the translation was reversed (back-translation) by experts who can use both Thai and English proficiently (bilingual person) for 2 persons. The questionnaire is divided into 3 areas as follows:

1) In terms of knowledge about COVID-19, the number of 12 answers was Choose right, wrong and unknown answers, correct answers are given 1 point, wrong answers and unknown answers are given 0 the scores are classified into 3 levels of average scores as follows (Zhong et al., 2020).

2) Attitudes about COVID-19, 2 questions, questionnaires to answer agree is given 1 point, Disagree and not sure are assigned 0 points, with the classification criteria of the score. Average is divided into 2 levels as follows (Zhong et al., 2020)

3) There are 2 behaviors in protecting oneself from contracting the COVID-19 virus. The answer was multiple choices, meaning if practice was given 1 point, no practice was given 0 point, with classification criteria. The grade point average was divided into 2 levels as follows (Zhong et al., 2020).

Statistics and Data analysis

The researcher analyzed all the data with a statistical package. by finding the frequency percentage Mean (M) and Standard Deviation (SD) to answer research questions. Analyze the relationship between variables. (Primary and dependent variables using Pearson's product-moment correlation. coefficient) by determining the relative level from the value r as follows (Wiersma & Jurs, 2009). Greater than .80 means very high in this study, the investigators set a statistical significance of .05. The agreement was tested. Preliminary is the normal curve distribution of the data with a normal probability plot. It is found that the data is distributed Normal (Hair, Black, Babin, & Anderson, 2010).

RESULTS

Descriptive data analysis

The result show that knowledge level, attitude about COVID-19 infection and behaviors to protect themselves from infection with the COVID-19 virus of people in U-Thong District Suphanburi Province the results showed that the sample group had knowledge of the COVID-19 infectious disease. At a high level (M = 9.44, SD = 1.34), 93.50 percent of the sample had knowledge of the main symptoms of COVID-19 infection, including fever, fatigue, dry cough, body aches. And more than half of the sample (54.20%) knew that their stuffy nose, runny nose and sneezing It is a symptom that is less common in people infected with COVID-19. These symptoms differ from the common cold. Additionally, 98.70% of the respondents knew that in order to prevent contracting the COVID-19 virus, individuals should avoid being in crowded places such as a flea market and should avoid using public transport 97 percent of the sample group. 30 know that the coviral-19 virus can spread via droplets into the respiratory tract from infected people. And 99.60 percent of the sample knew that people who were in contact with those infected with COVID-19. There should be 14 day quarantine in a suitable location. In terms of attitude, it was found that 83.40% of the sample groups were confident that finally, the coronavirus disease (COVID-19) can be controlled and 80.70% of the sample groups were confident that Thailand would be able to overcome the COVID-19 infection. Overall, the sample group had a positive attitude about COVID-19 infection (M = 1.97, SD = .19) In addition, in terms of self-protection behavior from infection with the COVID-19 virus 24 percent of the respondents said they had recently been to a crowded, crowded place, and 99.80 percent wore a mask when leaving the house every time. Overall, the sample group had self-protection behaviors from being infected with the COVID-19 virus in good level (M = 1.27, SD = .45).

Table 2 Mean (M), Standard Deviation (SD), Amount and Percentage of Knowledge Attitudes about COVID-19 and behaviors to protect themselves from infection with the COVID-19 virus of people in U-Thong District Suphanburi Province (n = 445)

list	M	SD	Amount and Percentage		
			True	Fale	Don't know
Knowledge (K) about COVID-19					
1. The main symptoms of COVID-19 infection are fever, fatigue, dry cough, body aches.	.93	.25	416 [4.30]	19 [4.30]	10 [2.20]

list	M	SD	Amount and Percentage		
			True	False	Don't know
2. Nasal stuffy, runny nose and sneezing are less common in people infected with COVID-19. These symptoms are different from the common cold	.54	.60	241 [54.20]	162 [36.40]	42 [9.40]
3. At present, there is no effective treatment. But early treatment will help patients recover from infection faster	.88	.32	389 [87.40]	33 [7.40]	23 [5.20]
4. Not everyone is infected with COVID-19. Then must enter the severe stage of the disease. Only the elderly / chronically ill and obese people are likely to have severe symptoms from infection.	.77	.42	311 [69.90]	96 [21.60]	38 [8.50]
5. Eating and touching wild animals. May result in being infected with COVID-19	.77	.42	242 [54.40]	104 [23.40]	99 [22.20]
6. People who are infected with COVID-19 Can't pass the virus to others when there is no fever	.26	.44	91 [20.40]	331 [74.40]	23 [5.20]
7. Covid-19 virus It is spread through respiratory droplets from an infected person.	.98	.13	433 [97.30]	8 [1.80]	4 [0.90]
8. The general public is able to wear a medical mask to prevent contracting the COVID-19 virus	.99	.09	44 [98.90]	4 [0.90]	1 [0.20]
9. For children and early adults It is not necessary to take a fever to prevent infection with the COVID-19 virus.	.38	.48	157 [35.30]	276 [62.00]	12 [2.70]
10. To prevent infection with the COVID-19 virus. Individuals should avoid going out to crowded places such as flea markets and avoid public transport.	.99	.08	439 [98.70]	3 [0.70]	3 [0.70]
11. Quarantine and treatment of people with COVID-19. It is an effective method to reduce the spread of COVID-19	.96	.20	418 [93.90]	20 [4.50]	7 [1.60]
12. People who come into contact with people who are infected with COVID-19. Isolation should be carried out immediately in appropriate places. Generally, the quarantine period is 14 days.	.99	.10	443 [99.60]	2 [0.40]	0 [0]
Overall	9.44	1.34			
Attitude (A) About the COVID-19 Infectious Disease					
A1. Finally, COVID-19 can be controlled	.98	.14	371 [83.40]	9 [2.00]	65 [14.60]
A2. He is confident that Thailand can overcome the overall COVID-19 pandemic.	.99	.10	359 [80.70]	5 [1.10]	81 [18.20]
Overall	1.97	.19			
Behavior (P) Protecting yourself from contracting COVID-19					
P1. Have you been in a crowded place recently?	.28	.45	107 [24.00]	321 [72.10]	17 [3.80]

list	M	SD	Amount and Percentage		
			True	False	Don't know
P2. Have you recently worn a mask when leaving the house?	.99	.10	444 [99.80]	1 [0.20]	0 [0]
Overall	1.27	.45			

The relationship between educational level, knowledge, attitude and behavior related to infectious disease covid-19 virus of people in U-Thong District Suphanburi Province.

An analysis of Pearson's product-moment correlation coefficient found that education levels, knowledge and attitudes about COVID-19 infection were a very low positive correlation with the self-protection behaviors of COVID-19 infection. People in U-Thong District SuphanBuri Province had a statistical significance of .05 ($r = .10, .18, \text{ and } .16$, respectively), details as shown in Table 3.

Table 3 the correlation coefficient (r) between educational level, knowledge, attitude and behavior related to coronavirus disease covid-19 of people in U-Thong District SuphanBuri Province (n = 445).

factor	r	p
education level	.10*	.03
Knowledge of COVID-19	.18*	.04
Attitudes about COVID-19	.16*	.03

* $p < .05$

CONCLUSION AND FUTURE WORK

Conclusion and Discussion

The results of the analysis of knowledge about self-protection from COVID-19 infection have average score 9.44, which is at a high level This may be a result of providing information from the Center for Covid-19 Situation Administration.(village health volunteers, VHV) to provide information in all channels and 46.10% had a bachelor's degree and 27.40 percent were employed in civil service, which the results of this study were consistent with the study of knowledge, attitudes and Practices related to infection with the COVID-19 virus of the people of Malaysia (Azlan, Hamzah, Sern, Ayub, & Mohamad, 2020) found that the subjects had knowledge about the prevention of COVID-19 infection disease is high by answering the questions correctly 80.50 percent. When considering each item, it was found that the low average scores were those who were infected with COVID-19 cannot transmit the virus to others when there is no fever ($M = .26$) For children and early adults It is not necessary to take a fever to prevent infection with the COVID-19 virus ($M = .38$) and stuffy nose, runny nose, and sneezing Rarely found in people infected with COVID-19. which these symptoms are different from the disease influenza ($M = .54$), in which these If people still do not know may affect anti-infective behavior covid-19 virus and causing an even greater epidemic Therefore, in the campaign to educate people More emphasis should be placed on these points. In terms of attitudes, 83% of the respondents in the study were confident that COVID-19 would eventually become infected will be controlled And 80.70% of the sample group believed that Thailand would be able to overcome infectious diseases. The COVID-19 virus may eventually be due to (village health volunteers, VHV) has provided information to the public covering all aspects in every aspect Day and stressed people's confidence in the work of the state to control the spread of the virus covid-19 virus As a result, people have a positive attitude towards the epidemic of COVID-19 which results This study is consistent with a survey study of knowledge, attitudes and practices to prevent infection covid-19 virus among Chinese citizens during the COVID-19 pandemic (Zhong et al., 2020). Most of the respondents, 97.10 percent, believed that the People's Republic of China would be able to overcome and fight the disease eventually infected with the COVID-19 virus. Behavioral aspects of

preventing infection with the COVID-19 virus the sample group in the study 99.80% was able to always wear a mask when leaving the house. This may be due to the behavior to protect you from addiction. Covid-19 virus this has been campaigned in every country around the world which is considered new normal behavior or new behaviors of people with changing lifestyles which people have practiced as a habit Therefore, the average score of knowledge was at a high level. as well as having a positive attitude about the COVID-19 virus and have good behaviors to protect themselves from infection with the COVID-19 virus, which is consistent with the study of Zhong et al. (2020) found that Chinese citizens are taking precautions against COVID-19 infection very well In particular, almost 98% of the samples wore a mask when leaving the house every time. Pandemic of the covid-19 virus in the People's Republic of China (Zhong et al., 2020).

As for the correlation analysis results, it was found that Education level, knowledge and attitudes about infection covid-19 virus There was a positive correlation with self-protection behaviors from COVID-19 infection ($r = .10, .18$ and $.16$ respectively) with a statistical significance of $.05$ indicating that people with good education. Knowledge of COVID-19 infection.at a high level and a positive attitude towards COVID-19 will have behavior to protect themselves from infection with the COVID-19 virus, which is in line with the research results of Hussein et al. (2020) found that the level of education. Knowledge and attitude were positively correlated with Iraqi people's protective behavior against COVID-19 and the results of the study on the relationship between Knowledge and attitudes about COVID-19 infection with behaviors to protect themselves from infection covid-19 virus of the Chinese people (Zhong et al., 2020). found that the level of education knowledge and attitude about the coronavirus disease COVID-19 There was a positive correlation with self-protection behaviors from addiction (Covid-19 virus. Saudi singer (Al-Hanawi et al., 2020). Knowledge and achievement of wisdom are closely related to each other...Reckless (Bloom, Behavior 1964).

Recommendation and Future Work

This study collected data using an online survey. Due to the epidemic situation Covid-19 virus in the district of U-Thong Suphanburi province, therefore, the researcher was unable to collect data with the group samples directly the group of people who answered the online research questionnaire via the LINE application may not be representatives of all groups of people causing the sample to not be distributed resulting in deviations in the answer. A quasi-experimental research study should be conducted to further the application of knowledge, attitudes and behaviors Prevention of COVID-19 infection in providing health education to the people for further campaigning and prevention of disease.

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