

# Knowledge And Behavior In Self-Defense Due To The Epidemic Situation Of The Coronavirus Disease 2019 (COVID-19) Of The Family In The Naval Flat Community, Bangkok In Thailand

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## Abstracts:

**Background:** The coronavirus disease 2019 (COVID-19) epidemic has affected all parts of Thailand. The effect of the virus and the death toll concerning the disease varied from country to country. Moreover, the number of fatalities and the infected cases in a country depended on the response of the governments regarding the availability of the healthcare facilities, contact tracing, locking down the country, and creating awareness among the people. Educating the public as much as possible The fastest will be to encourage people to have the correct self-care behaviors to reduce the damage and death of the population in the country.

**Objective:** To study the level of self-protection behavior from the coronavirus outbreak 2019 of the sample group in the naval flat community Bangkok.

**Methods:** The study had a cross-sectional predictive correlational design and included 376 families living in such communities. Descriptive statistics, Pearson's correlation coefficient, and stepwise multiple linear regression were used for data analysis.

**Results:** This research found that most had a high-level knowledge among 356 people (94.70%) it was found that most of them had a lot of self-defense behaviors of 329 people (88.00%). Extreme self-defense behavior. Knowledge and behavior are related in all pairs of variables. and knowledge can account for a 25% variation in infection prevention behaviors.

**Conclusion:** Educating is the least expensive investment. and is the most worthwhile promoting people to receive information consistent and truthful information will affect the behavior of caring people. This study was to collect data before easing measures to prevent infection. To enable relevant agencies to use the information obtained for future operations appropriately

**Keywords:** Knowledge/Behavior/Prevention

## Background

A new type of coronavirus (SARS-CoV-2) has been detected in Wuhan, Hubei province China. As the disease spread to many countries and

reached more serious dimensions, the whole world faced a new pandemic known as a coronavirus (COVID-19) (Ozdin and Bayrak Ozdin, 2020). The COVID-19 pandemic has

recently led to significant loss of life and the construction of stigma concerning the disease. With the passing days, as the coronavirus has spread across the globe, people are becoming furious about the impact of the virus. More than ninety million cases have been confirmed worldwide, and India's confirmed cases have reached over ten million. Each day 50–60,000 thousand new cases are being registered in Thailand. People, including healthcare workers, sanitary workers, and the police who are affected by COVID-19 are being stigmatized in India (Bhattacharya et al., 2020). As a result, they are facing discrimination in Indian society. Even those who have recovered from the disease also face unacceptance and discrimination (Bhattacharya et al., 2020; Bhanot et al., 2021).

Though COVID-19 was declared a global pandemic by WHO in early March 2020, the effect of the virus and the death toll concerning the disease varied from country to country. Moreover, the number of fatalities and the infected cases in a country depended on the response of the governments regarding the availability of the healthcare facilities, contact tracing, locking down the country, and creating awareness among the people. Hence, the fear and stigma attached to COVID-19 also varied from country to country. The present paper focuses on the COVID-19 stigma construction in the Indian context only. Once the nature and the causes of stigma construction are understood, then a proper action plan can be prepared to mitigate such stigma construction. Moreover, it is important to disseminate correct information to people to prevent the stigma attached to COVID-19. Credible knowledge plays an important role in enabling the government to develop strategies to address this public health crisis.

Although the COVID-19 vaccine is now available to the public, however vaccination program on a large scale is needed to achieve herd immunity (Neumann-Böhme et al., 2020). Herd immunity will safeguard the lives of the most susceptible groups and decrease the economic and social burden of the existing crisis. According to Schaffer et al. (2020), at least 55%–82% COVID-19 vaccine coverage is required to achieve successful herd immunity in the country. The success of a vaccination campaign depends

on the acceptance of vaccination (Neumann-Böhme et al., 2020).

The level of stigma associated with COVID-19 is based on three main factors. Firstly, it is a new disease, about which people still do not have adequate knowledge. Secondly, people are always afraid of the unknown. Finally, it is easy to connect the fear (WHO, 2020). This led to stigmatizing the affected people resulting in discriminatory behavior towards them. Moreover, certain areas and communities are labeled based on false reports circulating on social media. On the one hand, the affected people struggle with the symptoms and the pain of the disease, and on the other hand, they are challenged by the stereotypes and prejudice that result from a misconception about COVID-19. Various campaigns and advertisements are circulated by international bodies such as WHO and UNICEF to reduce the stigma attached to the disease, but still, new cases are reported of people committing suicide as well as of COVID-infected people suffering from discriminatory behavior. Therefore, there is an urgent need to fight such preconceived notions and rise as an educated society to respond to this adversity effectively. Under this backdrop, the present study examines the nature of stigma construction in Indian society during COVID-19 and explores the outcomes of COVID-19 stigma on corona patients' well-being.

Knowledge is essential for everyone to be able to deal with this epidemic. For a person to be healthy, one must take proper care of himself. And a person can have proper self-care only if he has an adequate level of competence. and continuing with the need for care, including the knowledge that will lead to self-care for well-being in which a person's self-care is a deliberate and objective action to maintain a healthy life and welfare. Self care education and increase the ability self-care ability performing self-care activities will reduce the infection and make people have a better quality of life.

### Methods Study Design

This cross-sectional predictive correlational study was conducted on residents of the Bangna naval flat community in Thailand from August 1 to October 30, 2021. Collecting data with residents of the Bangna naval flat community

during that period. Inclusion criteria (1) residents of the Bangna naval flat community who are aged 18 years and over; (2) Able to read, listen and write and can communicate Thai; (3) Consent to participate in the research. Exclusion criteria who are unable to participate in the research project throughout the research project and had no consent to participate in the research. The convenient sampling method was used, and the sample size was calculated using Taro Yamane. As such, we increased the number of samples by approximately 10% to anticipate the potential incomplete responses to the questionnaires. Total 6,249 residents of the Bangna naval flat community. The sample was based on probability sampling by the method of stratified sampling according to the proportion of the population.

### Research Instruments

Three research instruments were employed in this study: (1) Sociodemographic questionnaires; (2) Knowledge of coronavirus 2019 epidemic is knowledge of coronavirus 2019 and knowledge of transmission and infection.; (3) Self-defense behavior from the coronavirus 2019 epidemic is vaccination behavior. Preventive behaviors for coronavirus 2019 prevention behaviors in risk groups for coronavirus infection 2019.

### Sociodemographic Variable

The demographic questionnaire was characterized by 7 closed-ended or multiple-choice questions consisting of gender, age, monthly income, occupation, education level, marital status, and coronavirus infection 2019.

### Knowledge of coronavirus 2019

Knowledge of the coronavirus 2019 epidemic is knowledge of coronavirus 2019 and knowledge of transmission and infection. Knowledge of coronavirus 2019, 11 items from 1-11 and knowledge of infection, 11 items from 12-22. It was a multiple-choice, right, wrong, and unknown. Correct answers were given 2 points, wrong answers were given 1, and answers unknown were given 0 points. The average scores were classified into 3 levels as follows (Zhong, 2020). 0.00-14.00 points mean having a low level of knowledge, 15.00-28.00 points means having a moderate level of knowledge, and 29.00-44.00 points mean having a high level of knowledge.

The Cronbach's alpha coefficient in this study was 0.94

### The Behavioral Questionnaire on Self-Protection from Coronavirus Disease 2019

The behavioral questionnaire on self-protection from coronavirus disease 2019 consisted of 23 questions. The questionnaire was divided into 3 areas as follows: 1) In terms of vaccination, 5 items from 1-5 2) Prevention of viral infection, number of 10 items from 6-15 and 3) The group at risk of contracting the virus, amounting to 8 items, ranging from 16-23. It was a multiple-choice questionnaire, coronavirus prevention behaviors 2019, and coronavirus disease 2019 risk group behaviors were assessed on a Rating Scale with which the score was set as 5 levels as follows; Level 1 means not performing 1 point. Level 2 means sometimes practice 2 points. Level 3 means doing it quite often, 3 points. Level 4 means frequent practice 4 points. Level 5 means practice every time, 5 points. There are three levels of average score classification criteria as follows: 0.00-30.00 points mean less self-defense behavior, 31.00-60.00 points mean moderate self-defense behavior, and 61.00-90.00 points mean high self-defense behavior. Cronbach's alpha coefficient in this study was 0.93

### Data Collection

Data were collected by using questionnaires. Data were collected from August 1 to October 30, 2021. We used a convenience sample of 376 people who were willing to participate in the study. The participants then signed a consent form, and each person spent around 10-15 minutes completing the self-report questionnaires. Checked all questionnaires, and if an incomplete questionnaire was found, the participant was asked to complete the questionnaire. However, respondents who were not willing to participate could withdraw anytime.

### Data Analysis:

All the obtained data were analyzed using Statistical Package for Social Sciences version 21. The data are presented herein as the frequency, percentage, mean, standard deviation, maximum, and minimum. We used the chi-square

test and Pearson's correlation coefficient to determine the relationships among the participants' characteristics, stress levels, and depression levels. We also used stepwise-multiple regression analysis to determine the predictive factors of the students' depression. P-value < 0.05 was considered statistically significant

### Ethical Consideration

The present study was approved by the Ethical Committee from Suan Sunandha Rajabhat University Ethics Committee certificate number: COA.2-011/2022 and the directors of five faculties. Each participant received explanations about the study and had their rights protected throughout, including confidentiality and the right to refuse or withdraw from the study. The participants also received information and signed a consent form.

### Results:

#### Characteristics of the Participants

Most of the samples were male, 235 people (62.50%), most were aged between 30-49 years, and 102 people (27.10%), most of whom had monthly income. 20,001-30,000 baht, 141 people (37.50%), most of them civil servants, 190 people, (50.50%), with an education level is lower than a diploma of 233 people (62.00%), most of them are married, 180 people (47.90%), most of them have not been infected with coronavirus 2019 in their family of 303 people (80.60%) and there are 74 family members infected with coronavirus, accounting for 19.70%, and most of them have been infected with coronavirus 2019 in families, 70 people (18.60%) as shown in Table 1

**Table 1 Sociodemographic Status of the Students**

Sociodemographic	Frequency	Percent
1. Gender		
man	235	62.50
female	141	37.50
2. Age		
under 20	75	19.90
20-29 years	91	24.20
30-39 years	102	27.10
40-49 years	71	18.90
50+	37	9.80
3. Monthly income		
less than 5,000 baht	71	18.90
5,001-10,000 baht	18	4.80
10,001-20,000 baht	89	23.70
20,001-30,000 baht	141	37.50
More than 30,001 baht	57	15.20
4. Career		

<b>Sociodemographic</b>	<b>Frequency</b>	<b>Percent</b>
government officer	190	50.50
state enterprise	30	8.00
hiring/Trading/Agriculture	30	8.00
student/student	84	22.30
personal business	42	11.20
5. Education level		
lower than diploma	233	62.00
diploma (High Vocational Certificate)	61	16.20
bachelor's degree or equivalent	59	15.70
postgraduate	23	6.10
6. Marital status		
single	165	43.90
get married	180	47.90
widowed/divorced/separated	31	8.20
7. There is a family member infected with coronavirus 2019.		
have	73	19.40
How many times have you been infected?		
1 time	70	18.60
2 times	4	1.10
3 times	0	0.00
4 times	0	0.00
Year of infection		
2019	1	0.30
2020	7	1.90
2021	62	16.50
2022	4	1.10
infection results		
died	5	1.30
healed	69	18.40
treatment site		

<b>Sociodemographic</b>	<b>Frequency</b>	<b>Percent</b>
treatment at home	6	1.60
hospitalized	43	11.40
treatment at the field hospital	20	5.30
treatment at the hotel	5	1.30
do not have	303	80.60
8. During the past year Have you been infected with coronavirus 2019? How many times have you been infected?		
have	68	18.10
How many times have you been infected?		
1 time	67	17.80
2 times	1	0.30
3 times	0	0.00
4 times	0	0.00
Year of infection		
2019	1	0.30
2020	3	0.80
2021	41	10.90
2022	23	81.90
Infection results		
In the treatment period	4	1.10
Healed	64	17.00
Treatment site		
Treatment at home	6	1.60
Hospitalized	21	5.60
Treatment at a field hospital	24	6.40
Treatment at the hotel	17	4.50
Do not have	308	81.90
Total	<b>376</b>	<b>100.00</b>

#### **Level of knowledge about the 2019 coronavirus epidemic**

The amount and percentage of the level of knowledge about the 2019 coronavirus epidemic of the sample group in the Bangna naval flat

community. It was found that most had a high-level knowledge of 356 people (94.70%), followed by 20 people with moderate knowledge,

accounting for 5.30%. The least was having low-level knowledge of 0 people see table 2

**Table 2 Frequency, Percent, Mean and Standard Deviation of Level of knowledge about the 2019 coronavirus epidemic**

level of knowledge about the epidemic coronavirus disease 2019	Number	Percentage
level of knowledge about the epidemic coronavirus disease 2019		
Low level of knowledge	0	0.00
Moderate knowledge	20	5.30
High level of knowledge	356	94.70
<b>Total</b>	<b>376</b>	<b>100.00</b>

### **Self-defense behavior from the 2019 coronavirus epidemic**

The amount and percentage of Self-defense behavior from the 2019 Coronavirus outbreak of the Bangna Naval Flat Community Overall, it was found that most of them had a lot of self-

defense behaviors of 329 people, representing 88.00 percent, followed by having moderate self-defense behaviors of 47 people, accounting for for for 12.00 percent. The lowest was having low self-defense behaviors, number 0 people see in table 3.

**Table 3 Frequency, Percent of self-defense behavior from the 2019 coronavirus epidemic**

Level of self-defense behavior from the outbreak of coronavirus 2019	Frequency	Percent
Less self-defense behavior	0	0.00
Moderate self-defense behavior	47	12.00
Extreme self-defense behavior	329	88.00
<b>Total</b>	<b>376</b>	<b>100.00</b>

### **An analysis of the relationship between knowledge of the 2019 coronavirus epidemic and self-defense behaviors from the coronavirus 2019 epidemic.**

It was found that the knowledge of the coronavirus disease 2019 was related to A moderate positive correlation with knowledge of coronavirus 2019 transmission and exposure ( $r = 0.650$ ). A moderate positive correlation of knowledge on coronavirus 2019 was moderate. In coronavirus 2019 prevention behaviors ( $r =$

0.522), coronavirus 2019 knowledge was low and positively associated with coronavirus 2019 risk group behaviors ( $r = 0.461$ ). Knowledge of coronavirus disease 2019 transmission and transmission has a positive correlation. At a low level with coronavirus 2019 prevention behaviors ( $r = 0.421$ ), knowledge of coronavirus disease 2019 transmission and exposure was positively correlated at a low level. The coronavirus 2019 prevention behavior was highly positively correlated with the coronavirus 2019 risk group behavior ( $r = 0.410$ ). 0.753) see in table 4

**Table 4 Correlation Matrix of Depression**

	Virus knowledge	Virus transmission knowledge	Vaccination Behavior	Defensive behavior
Virus knowledge	1			
Virus transmission knowledge	.650**	1		
Vaccination behavior	.522**	.421**	1	
Defensive behavior	.461**	.410**	.753**	1

Note: \*p-value < 0.05; \*\*p-value < 0.01

From Table 5, it was found that knowledge could explain the variation in behavior in preventing infection by percentage. 25.50 The knowledge of pathogens could explain the statistically significant variation in self-care behaviors.

**Table 5 Regression coefficients of predicted variables and statistics of knowledge and behavior**

Measure	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std.Error	Beta		
Constant	1.509	.300		5.037	.000
1. Virus knowledge	1.037	.152	.401	6.824	.000
2. Coronavirus transmission knowledge	.504	.208	.142	2.420	.016

p-value<0.05, R<sup>2</sup>=0.255, Adjusted R<sup>2</sup> = 0.251, F=63.89

## Discussion

For this research, The objective of this study was to study self-defense behaviors in coronavirus infection 2019. The sample consisted of 376 persons living in a flat community Bangna. The level of self-care behavior was at a very good level.

The results of this research are consistent with Sahoo, & Patel. (2021) have studied social stigma in time of COVID-19 pandemic: evidence from India has a result. The study finds that COVID-19 patients or suspected cases are insulted and discriminated against rudely by their family members and neighbors, and in many cases, they are not allowed to enter the house or the neighborhood. The study has also pointed out that many COVID-19 patients or suspected cases have committed suicide as a result of stigmatization. Finally, the study explores that this social stigma is spreading due to fake news, lack of awareness, and fear of corona infection.

Aziz, Khan Niazi, & Ghani. (2021) have studied effect of knowledge, social and religious factors affecting the intention of Muslims in Pakistan to receive COVID-19 vaccination: the

mediating role of attitude towards COVID-19 vaccination. Results for direct effect showed a significant negative effect of Islamic religiosity, perceived behavioral control, halal consciousness, the perceived side effect of COVID-19 vaccination, social influence, subjective norm and group conformity on attitude towards COVID-19 vaccination. In contrast, insignificant results showed no relationship between perceived risk from COVID-19 infection and perceived efficacy of COVID-19 vaccination with attitude towards COVID-19 vaccination. Results for mediating effect showed the significant negative mediating effect of attitude towards COVID-19 vaccination between Islamic religiosity, perceived behavioral control, halal consciousness, perceived side effect, social influence, subjective norm, group conformity, and intention to receive COVID-19 vaccination. While results showed the insignificant mediation of attitude towards COVID-19 between perceived risk from COVID-19 infection, perceived efficacy of COVID-19 vaccination, and intention to receive COVID-19 vaccination.



Magnus Osahon Igbinoia, Omorodion Okuonghae, John Oluwaseye Adebayo. (2021). Information literacy competence in curtailing fake news about the COVID-19 pandemic among undergraduates in Nigeria. The study also revealed that Information Literacy Competency had a significant effect in curtailing the spread of COVID-19 fake news with a grand mean of 3.28 against the criterion mean of 2.5. It is implied that Library and Information Science undergraduates are educationally positioned to acquire Information Literacy Competency which is crucial to their identification of fake news and helps to curtail its spread.

This research is collecting data while the government is considering a policy of easing the lockdown situation, which has not been studied by other scholars. For this reason, the results of this research can confirm that Providing information is critical to the infection prevention behaviors of the samples. However, the correct knowledge to the point with thoroughness will allow people to receive accurate information and lead to a reduction in infection. The number of death rates has decreased. and be able to carry out daily life normally shortly.

### Conclusion

This research found that knowledge is important to change the behavior of self-care of people. The knowledge of the spread of the coronavirus disease 2019 is knowledge of the coronavirus disease 2019 and the knowledge of infection transmission influences self-care behavior in preventing infection. The results of this research were conducted with a sample with most of the education below the bachelor's degree level. That means access to information. and government measures that promote knowledge sharing are important for the sample group to gain knowledge thoroughly. which reduced the infection.

### Limitation

This research is a survey result in only qualitative data and conducting a study of specific individuals limited study period. Therefore, there should be a qualitative research study to obtain complete information from diverse sample groups to lead to the creation of appropriate practice guidelines and should increase the study

period because the measures issued by the government affect the self-care behavior of the people.

### Declaration of Conflicting Interest

The authors declare no conflict of interest.

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### Author Contribution

J. O. drafted the article and conducted a review of the literature. J. O., N. O., and J. S. conducted the data and data analysis. J.O. contributed to the design and concept, and reviewed and revised the manuscript. All authors agreed with the final version of the article.

### Author Biographies

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