Self-Protection Behavior of COVID-19 among the People Surveillance Area in Nakhon Si Thammarat Province, Thailand

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Abstract:- This research was a cross-sectional survey. The purposes were to investigate the level of health beliefs, level of self-protection behavior, and factors connected to self-protection behavior among COVID-19.Nakhon Si Thammarat province was a research area.People aged 15 **and above were included in the study.Data was collected during June and July of** 2021. **A random sample of** 2,220 **people was collected in a systematic manner. Cronbach's alpha coefficient for the research questionnaire was** 0.859.**Data analysis statistics were number, percentage, mean, standard deviation, and multiple logistic regression to analyze factors related to self-defense behavior from COVID-**19.**

The results showed the questionnaire was returned by 99.63% **of the participants. The findings indicate that severity, perceived benefits, perception of risk, motivation, and other factors are all at a high level. Obstacle perception was moderate, whereas self-defense behaviors were appropriate** (53.61 **percent).Gender, age, perceived risk, perceived severity, and perceived obstacle were all associated with COVID-**19 **self-defense behaviors in a significant (p** 0.05) **way.Females outperformed males in terms of behavior by** 1.43 **times (OR**adj **=** 1.43, 95%**CI:** 1.13–1.79).**People aged** 50-59 **and ≥** 60 **years had** 2.23, 2.20 **times more self-protective behaviors against COVID-**19 **than people aged ≤** 29 **years (OR**adj**=2.23**, 95%**CI:** 1.30-3.82, **OR**adj**=2.20**, 95%**CI:** 1.17-4.12).**People with appropriate risk perception performed 2.60 times better than those with enhanced risk perception (OR**adj **= 2.60, 95%CI: 2.09-3.22).People with appropriate perceptions of violence were 1.66 times better in behavior compared to people with less perceived violence (OR**adj**=1.66,95%CI: 1.34-2.07).People with adequate perceived barrier behavior were 5.22 times better than those with low perceived barriers (ORadj=5.22, 95%CI: 4.35-6.26).**

Therefore, the adoption of health beliefs should be designed for people to be able to comply with self-protection measures against COVID-19.There is awareness of disease risk exposure, perceived benefit of disease prevention and perceived barriers to disease prevention. Develop an activity model suitable for the gender and age range of people in Nakhon Si Thammarat Province.

Keywords:- Behaviors, self-protection; COVID-19.

I. INTRODUCTION

Many countries throughout the world are suffering from the Coronavirus 2019 (COVID-19), for which the World Health Organization (WHO) has already declared a global pandemic for 2020.[1] It originated in China near the end of 2019 as part of the COVID-19 crisis, and confirmed cases have already been confirmed in other countries across the world.According to the current situation, the number of cases and deaths has increased all over the world.The COVID-19 virus can be spread from person to person by coughing, sneezing, or direct contact with secretions such as human snot and saliva.Slight symptoms like a common cold, moderate symptoms include pneumonia, and severe symptoms might end in death.[2]WHO has also implemented a plan to assist people in protecting themselves, such as regular hand washing and coughing and sneezing while covering their mouth and nose.Freshly cooked meals should always be consumed.Close contact with persons who have respiratory symptoms such as coughing and sneezing should be avoided, and all countries should improve surveillance, prevention, and control.Then there are social distancing recommendations, such as keeping at least 1 meter between oneself and individuals who are coughing or sneezing, because the virus can be transferred by minute droplets.As a result of coughing or sneezing, we may be able to breathe the viruses into the body if they are too close together.At the same time, avoid physical contact to avoid catching the disease or infecting others. Because of the COVID-19 virus, which might spread rapidly, avoid leaving the house or using public transportation.[3]

COVID-19 caused a new pandemic in Thailand in April 2021, with 49,992 cases in this phase and 269 deaths (as of May 8, 2021), total 86,924 people infected since the virus's outbreak, 452 deaths. According to the Department of Disease Control, there are 19 risk factors for COVID-19 infection. The most at-risk from close contact with patients

was 44.3%, followed by having been to entertainment venues at 25.2% and proactively screening patients at 9.8%, respectively. [4] A total of 567 confirmed cases and five fatalities were reported in Nakhon Si Thammarat, and 551 were discovered in April 2021, with 301 males and 254 females, with the most prevalent age group, 31–40 years, accounting for 96 people.Six children under the age of one were also confirmed to be infected.An epidemiological examination indicated that the patients were infected with several clusters, which had spread to almost every district in the province of Nakhon Si Thammarat.[5].Thailand's Ministry of Public Health asks people for cooperation to adhere to the principles of prevention of COVID-19 but still finds patients continuously. Reducing the number of cases requires avoiding public contact with COVID-19 risk areas and reducing travel to crowded, poorly ventilated, or crowded places.In the event that it is necessary to travel to work or go out to do personal errands, intensive measures should be taken to prevent the spread of COVID-19.Research in countries such as Egypt has shown that people are perceived to have a perception of COVID-19 as a life-threatening disease.It also found that the factors of age, education level, and income of the people studied There is a relationship with the behavior of preventing COVID-19.[6].A research on COVID-19 perception among Egyptians and Nigerians in Africa demonstrated that education, background, and nationality were related with the COVID-19 epidemic.[7]Gender, age, educational level, work characteristics, and place of residence were found to be associated with the behavioral effect of COVID-19 in an Iranian study. [8]Research done in Pakistan discovered that factors such as age, gender, and educational level were related to behavioral impacts on COVID-19.[9]As a result, COVID-19 health belief patterns, self-defense actions of people, and factors connected to self-protection behaviors should be researched. In this regard, the information obtained will be utilized to improve COVID-19 disease preventive behavior among people in relation to safeguarding from the COVID-19 virus. As a result, COVID-19 health belief patterns, self-defense actions of people, and factors connected to self-protection behaviors should be researched. In this regard, the information obtained will be utilized to improve COVID-19 disease preventive behavior among people in relation to safeguarding from the COVID-19 virus.

II. MATERIALS ANDMETHOD

A cross-sectional survey was included in this research. The research population consisted of persons aged 15 and up residing in Nakhon Si Thammarat province. Three groups of samples were selected from districts with cumulative COVID-19 cases: (1) districts with more than 50 cumulative cases; (2) districts with 1–50 cumulative cases; and (3) districts without. Patients (Information as of May 8, 2021).[5]The sample size was calculated using the unknown population mean estimation formula.A multistage sample was randomly selected.[10]Confidence (Z equals 1.96), Degree of variability; σ.[11]The total sample was 2,220 people.

A. Instrument and Data Collection
The questionnaire was developed using a literature review and the Becker and Maiman health belief model framework. [12]Part 2 The 58-item health belief model consisted of six aspects (perceived risk, perceived severity, perceived benefit, perceived barriers, motivation, and other factors).Part 3: COVID-19 Self-Protection Behaviors.[13] Three experts reviewed the instrument for content validity and language compatibility. The IOC value ranges from 0.67 to 1.00.The questionnaire was examined for reliability (Try it out), and the Cronbach's alpha coefficient confidence was 0.859.Data will be collected between June and July of 2021.Data was collected online from a sample of people aged 19 and above (Google form).This questionnaire must be used by a sample of 15–18-year-olds who have parental consent.The research team discussed the study's aims and specifics, and they requested help in filling out the questionnaire.

B. Statistical Analysis
Analyze the data using computer software applications. Descriptive statistics such as percentage, mean, and standard deviation were utilized to analyze data from COVID-19 on personal characteristics, health attitudes, and self-defense behaviors. Analytical statistics such as odds ratio and multiple logistic regression were utilized to examine parameters connected to self-protection behavior in COVID-19.

C. Ethical Considerations
The Research and Ethics Committee on Human Research Project Exc-05/2564, Boromarajonani College of Nursing, Nakhon Si Thammarat Province, Thailand, approved this research.

III. RESULTS

A total of 2,220 participants were included in this study.The completed questionnaires were returned by 2,214 people, representing 99.73 percent of the overall.The findings of the study could be categorized as follows:

A. Personal characteristicdata

Variable	Number (%)
Gender	
Male	526 (23.76)
Female	1,688 (76.24)
Age (year)	
≤ 29	378 (17.07)
30-39	294 (13.28)
40-49	587 (26.51)
50-59	756 (34.15)
≥ 60	199 (8.99)
(Maximum=15, Maximum=70, Mean=44.19, SD.=13.58)	
Occupational status	
Governmental org	275 (12.42)
Private organization	129 (5.83)
Trade	230 (10.39)
Agriculture	852 (38.48)
Work for hire	341 (15.41)
Personal business	132 (5.96)

Student	*255 (11.52)*
Marital status	
Single	*517 (23.35)*
Married	*1,434 (64.77)*
Widowed	*164 (7.41)*
Separated/Divorced	*99 (4.47)*
Educational Status	
No Formal Education/ Primary	*526 (23.76)*
Secondary	*670 (30.26)*
Diploma/Vocational certificate	*207 (9.35)*
Higher education	*475 (21.45)*
Master' degree/Ph.D	*100 (4.52)*
Study	*236 (10.66)*
Receiving information	
Yes	*2,214 (100.00)*
TV.	
Yes	*1,792 (80.94)*
No	*422 (19.1)*
Friend	
Yes	*698 (31.53)*
No	*1,516 (68.47)*
Medical personal	
Yes	*1,557 (70.33)*
No	*657 (29.67)*
Public health volunteer	
Yes	*1,348 (62.51)*
No	*830 (37.49)*
Voice of line	
Yes	*278 (12.56)*
No	*1,936 (87.44)*
Newspaper	
Yes	*175 (7.90)*
No	*2,039 (92.10)*
FeFacebookine	
Yes	*1,411 (63.73)*
No	*803 (36.27)*

Table 1: Shows the number and percentage of people participating

According to Table 1, the majority of participants (76.24%) were female, and the majority were between the ages of 50 and 59. (34.15% of the total).The majority of them (38.48 %) worked in agriculture, and the majority were married (64.77 %).The highest level of secondary education (30.26 percent). The greatest amount of information regarding COVID-19 was obtained via television (80.94 percent), followed by health workers (70.33 percent) and Feckbook/Line (63.63 percent), respectively.

A. Health belief level

Table 2 Shows the number and percentage of participants' health beliefs.

Health belief	Number (%)
Perceived susceptibility	
Appropriate	1,200 (54.20)
Revamp	1,014 (45.80)
Perceived severity	
Appropriate	1,055 (47.65)
Revamp	1,159 (52.35)
Perceived benefits	
Appropriate	1,117 (50.45)
Revamp	1,095 (49.55)
Perceived barriers	
Appropriate	1,204 (54.38)
Revamp	1,010 (45.62)
Health motivation	
Appropriate	1,040 (46.97)
Revamp	1,174 (53.03)
Modifying factors*	
Appropriate	1,033 (46.67)
Revamp	1,181 (53.34)

*Relationships between people/medical personnel and information receipt.

Table 2 shows that the following categories have an appropriate level that is higher than the level that requires improvement: perceived susceptibility, perceived advantages, and perceived barriers (54.20:45.80 %, 50.45:49.55% and 54.38:45.62 %).Perceived severity, health motivation, and modifiable factors are the levels that require improvement over the appropriate levels (47.65:52.35%, 46.97:53.03%, and 46.67:53.34%).

B. COVID-19 self-defense behavior.

Table 3 presents the number and percentage of self-defense behaviors from COVID-19.

Self-Protection Behavior of Covid-19	Number (%)
Appropriate	1,187 (53.61)
Revamp	1,027 (46.39)

Table 3 revealed that the COVID-19 self-protection behaviors had a comparable proportion of appropriate and need for improvement (53.61: 46.39%).

Table 4 shows the mean, standard deviation, and level of COVID-19 prevention behaviors classified by item.

Self-Protection Behavior of Covid-19	Mean	SD.	Level
D: Social Distancing			
1. I maintain a distance of 1-2 meters when meeting and talking to other people is necessary	4.50	0.74	Appropriate
Self-Protection Behavior of Covid-19	Mean	SD.	Level
2. I use my regular spoon when eating. with friends and sit 1-2 meters apart	4.54	0.79	Appropriate
3. I avoid entering crowded or crowded places	4.52	0.80	Appropriate
4. I touch and hug your coworkers or people around you because they are close people	3.69	1.51	Revamp
5. I have traveled to an area that has been reported as an epidemic risk area.	3.99	1.50	Revamp
M: Mask Wearing			
1. I wear a mask or cloth mask when leaving the house.	4.80	0.67	Appropriate
2. I don't were a mask or cloth mask while you exercise outside*	3.56	1.54	Revamp
3. I will use a mask or cloth mask only when you are coughing, sneezing, or have a cold*	3.42	1.73	Revamp
4. When a relative or close friend comes to you at home you will were a mask or cloth mask while together	4.32	1.03	Appropriate
5. I don't wear a mask or cloth mask while sitting in the same car with another person*	3.67	1.62	Revamp
H: Hand Washing			
1. I wash your hands with soap/alcohol gel. when in contact with objects and places outside the home	4.64	0.74	Appropriate
2. After disposing of used masks you clean your hands with alcohol gel or water and soap immediately	4.49	0.82	Appropriate
3. I wash my hands after going to the bathroom. after touching the dirt and after touching the doorknob outside the house	4.60	0.68	Appropriate
4. I did not wash your hands after receiving things from other people*	3.76	1.50	Revamp
5. When you come back from work or errands outside the home. You will wash your hands before entering the house	4.49	0.88	Appropriate
T: Testing			
1. I check your temperature when you go to various places to watch for the infection of the COVID-19 virus	4.68	0.66	Appropriate
2. I will refer your friends to get tested for COVID-19. When your friend has symptoms related to COVID-19	4.36	0.94	Appropriate
3. I am bored or annoyed with checking your temperature when you go out on an errand*	3.74	1.59	Revamp
4. How to spot symptoms by checking the temperature at home when you return from outside the home	3.77	1.31	Revamp
T: Thai Cha Na			
1. I scan Thai Cha Na before entering and leaving public places.	3.64	1.40	Revamp
Self-Protection Behavior	4.16	0.52	-

*Negative

Table 4 displays the findings of the top three average COVID-19 self-protection behaviors: wearing a mask or cloth mask while leaving the house, and taking a temperature measurement when going outdoors to be monitored. When in touch with things or places outside the house, this was followed by hand washing with soap/alcohol gel.

The top three least average behaviors include not using a mask or cloth mask while riding in a car with another passenger.

Scanning the Thai Chana application before entering and exiting public locations, and wearing a mask or cotton mask only when coughing, sneezing, or suffering from a cold.

C. Factors related to self-protection behaviour of Covid-19

Table 5 Multivariate factors related to self-protection behavior of COVID-19

Variable	Appropriate (%)	Revamp (%)	P-value (χ2)	OR	95% CI	aOR	95% CI	P-value
Gender								
Male	234 (44.49)	292 (55.51)	< 0.001**	Ref	-	-	-	-
Female	953 (56.46)	735 (43.54)		1.62	1.33-1.97	1.43	1.13-1.79	< 0.001**
Age (year)								
≤29	82 (43.19)	121 (56.81)	< 0.001**	Ref	-	-	-	-
30-39	75 (45.45)	90 (54.55)		1.10	0.73-1.65	1.52	0.87-2.63	0.138
40-49	297 (57.74)	277 (48.26)		1.41	1.03-1.94*	1.69	1.00-2.87	0.050
50-59	612 (57.57)	451 (42.43)		1.79	1.33-2.40	2.23	1.30-3.82	0.004**
≥60	111 (55.78)	88 (44.22)		1.66	1.12-2.45*	2.20	1.17-4.12	0.014*
(Mean=44.19, SD.=13.58)								
Occupational status								
Governmental org	188 (68.36)	87 (31.64)	< 0.001**	Ref	-	-	-	-
Private organization	75 (58.14)	54 (41.86)		0.64	0.42-0.99*	1.03	0.62-1.69	0.916
Student	130 (56.52)	100 (43.48)		0.60	0.42-0.87**	1.01	0.64-1.59	0.970
Student	467 (54.81)	385 (45.19)		0.56	0.42-0.75**	0.98	0.66-1.45	0.912
Student	141 (41.35)	200 (58.65)		0.33	0.23-0.46**	0.78	0.50-1.22	0.279
Student	72 (54.55)	60 (45.45)		0.56	0.36-0.85**	1.11	0.67-1.84	0.677
Student	114 (44.71)	141 (55.29)		0.37	0.26-0.53**	0.88	0.53-1.48	0.632
Marital status								
Single	253 (48.94)	264 (51.06)	0.009**	Ref	-	-	-	-
Married	778 (54.25)	656 (45.75)		1.24	1.01-1.51*	0.88	0.66-1.19	0.417
Widowed	90 (54.88)	74 (55.12)		1.27	0.89-1.81	-	-	-
Separated/Divorced	66 (66.67)	33 (33.33)		2.09	1.33-3.28**	1.56	0.90-2.69	0.11
Educational Status								
No Formal Education/ Primary	238 (45.25)	288 (54.75)	< 0.001**	Ref	-	-	-	-
Secondary	362 (54.03)	308 (45.97)		1.42	1.13-1.79**	1.10	0.84-1.43	0.495
Diploma/Vocational certificate	112 (54.11)	95 (45.89)		1.43	1.03-1.97*	1.22	0.84-1.79	0.297
Higher education	307 (64.63)	168 (35.37)		2.21	1.71-2.85**	1.38	1.00-1.90	0.051
Master' degree/Ph.D	62 (62.00)	38 (38.00)		1.97	1.27-3.06**	1.08	0.63-1.86	0.773
Study	106 (44.92)	130 (55.08)		0.99	0.73-1.34	-	-	-
Perceived susceptibility								
Appropriate	843 (70.25)	357 (29.75)	< 0.001**	Ref	-	-	-	-
Revamp	344 (33.93)	670 (66.07)		4.60	3.84-5.50**	2.60	2.09-3.22	< 0.001**
Perceived severity								
Table 5 Multivariate factors related to self-protection behavior of COVID-19								
Variable	**Appropriate (%)**	**Revamp (%)**	**P-value (χ2)**	**OR**	**95% CI**	**aOR**	**95% CI**	**P-value**
Appropriate	739 (70.05)	316 (29.95)	<	Ref	-	-	-	-

			0.001**					
Revamp	448 (38.65)	711 (61.35)		3.71	3.11-4.43**	1.66	1.34-2.07	< 0.001**
Perceived benefits								
Appropriate	706 (63.21)	411 (36.79)	< 0.001**	Ref	-	-	-	-
Revamp	481 (43.85)	616 (56.15)		2.20	1.86-2.61**	1.13	0.90-1.42	0.292
Perceived barriers								
Appropriate	860 (71.43)	344 (28.57)	< 0.001**	Ref	-	-	-	-
Revamp	327 (32.38)	683 (76.72)		5.22	4.35-6.26**	3.38	2.77-4.12**	< 0.001**
Health motivation								
Appropriate	630 (60.58)	410 (39.42)	< 0.001**	Ref	-	-	-	-
Revamp	557 (47.44)	617 (52.56)		1.70	1.44-2.02**	1.05	0.83-1.33	0.702
Modifying factors								
Appropriate	610 (59.05)	423 (40.95)	< 0.001**	Ref	-	-	-	-
Revamp	577 (48.86)	604 (51.14)		1.51	1.28-1.79**	1.04	0.82-1.32	0.779

The analysis of multiple logistic regression found that the factors associated with self-defense behaviors from COVID-19 were gender, age, perceived susceptibility, perceived severity, and perceived barriers (P <0.05).Females showed 1.43 times better self-defense behaviors compared to males (aOR = 1.43, 95%CI = 1.13–1.79(.Ages 50-59 and ≥60 years old had 2.23 and 2.20 times better self-defense behaviors than those ≤29 years old (aOR = 2.23, 95%CI= 1.30-3.82, aOR= 2.20, 95%. CI = 1.17-4.12).Participants who had perceived appropriate susceptibility behaviors were 2.60 times more self-protective than participants with an improvement in perceived susceptibility (aOR = 2.60, 95%CI = 2.09-3.22).Participants who perceived the appropriate severity level had 1.66 times better self-defensebehavior than those who perceived an improvement in severity (aOR = 1.66, 95 percent CI = 1.34–2.07).Participants who perceived the appropriate level of barriers demonstrated 3.38 times better self-defensebehavior than those who perceived the level of improvement in barriers (aOR = 3.38, 95 percent CI = 2.77-4.12).

IV. DISCLUSION

The findings of this research revealed that all areas of health beliefs were approximately the same.Perceived susceptibility, perceived benefits, and perceived barriers of the appropriate level of participants are proportional to the greater the level of improvement.That could be because COVID-19 is a worldwide pandemic.All countries will have ongoing campaigns, including Thailand, to make people aware of the risks of COVID-19.Perception of risk and perception of the severity of the disease, as well as the perception of the benefits of disease prevention, affect the behavior of a person. [14].Consistent with research found that people were aware that COVID-19 can be easily transmitted through aerosol droplets, saliva of infected persons (4.66+0.55). The belief that COVID-19 was a hazardous condition may have increased the likelihood of mortality (4.53+0.60). Recognizing the penalty for not wearing a mask when going outside may enhance your chances of catching COVID-19 (4.58+0.68).Monitoring the epidemic situation will also make individuals more aware of how to prevent infection (4.54+0.73).People can reduce their risk of getting COVID-19 by following WHO guidelines.People perceived the benefits of implementing the strategy, recognizing that remaining at home and not going out was a means to avoid COVID-19 infection (4.46+0.65).Refraining from or limiting travel to get the flu lowers infection (4.44+0.63).Regarding high-risk individuals, a 14-day quarantine can prevent infection (4.43 + 0.66).This is consistent with research that reveal how people perceive illness risk and the major barriers to disease prevention. [15]Similarly, researchers of the North Shoa Zone, Ethiopia discovered that the disease's risk perception was at an appropriate level(55.2 %).[16]According to a survey conducted in Addis Abeba, Ethiopia, two-thirds of respondents had a positive perspective on risk, whereas four in five had a positive perception of hurdles, and the proportion was fairly comparable. [17]As shown in a research conducted in Sudan, perceived risk exposure was higher than low, and the proportion was similar.While there was a high level of perceived violence, the ratio was 3:2 to low. [18].

Regarding the perception of barriers to disease prevention. However, wearing a mask makes it difficult to breathe and speak (2.92+1.24) or having dry skin on the hands causes people to have some obstacles, such as the inability to get the medicine by themselves by frequent use of alcohol gel (2.66+1.08), but people are still able to lead a new normal life, requiring adjustment on both the part of the person who has to strictly follow the measures such as department stores, shops, and government offices that need to provide alcohol gel to be sufficient for service recipients

(4.32+ 0.71) or the establishment of a training facility to provide knowledge on COVID-19 prevention (4.06+0.86). This is consistent with studies in the North Shoa Zone, Ethiopia that found that perceived barriers to disease prevention were at an optimal level (53.9%). [16]

The aspects that had to be perceived to be improved more than those perceived at an appropriate level were perceived severity, health motivation, and modifying factors. Even though people are aware that COVID-19 has life-threatening severity (4.53+0.67) and that those with the underlying disease may increase the severity to life-threatening (4.61+0.62), with the COVID-19 outbreak, people have begun to adjust by living a new normal life, which may cause people to be less aware of the severity of the disease. This, coupled with the increasing number of people being vaccinated, led to the idea that vaccines could protect against COVID-19. In line with studies in Addis Ababa, Ethiopia, perceptions of the severity of the disease were proportional to perceived barriers at the level, which is less than at a good level, but the proportions are similar. [17] But this study is inconsistent with studies in Kerala state, India that found that people perceive the severity of the infection the most [15].

As for the motivation factor, it was found that although the community had activities to encourage them to follow the DMHTT measures continuously (4.20+0.75), the family members encouraged them to take care of their health to stay healthy (4.35+0.66) and the hospital disseminated information about COVID-19. To be able to practice to prevent disease (4.15 +0.85), but people still perceive that compliance with DMHTT measures is uncomfortable (3.27 +1.21), thus, the perception is at a level that needs to be adjusted to a greater proportion. suitable level This is consistent with a study in Sri Lanka that found that motivation to promote health was good [19], as well as the study in Addis Ababa, Ethiopia that found a high level of perception for implementation. The proportions are very similar [17], even though much lower.

People received less advice from health officials than they perceived from television (1.75+0.78, while receiving information about risk areas (4.45+0.58) and news about COVID-19 made it easy to act (4.45+0.58), but people still have concerns when going to places like schools, workplaces, or communities, especially those at risk. In addition to the COVID-19 vaccine's confidence (3.53+1.16), which is congruent with Golestan Province in Northern Iran, it was discovered to benefit from the following information on television and radio [20]. Self-protection behaviors COVID-19 The current level is more appropriate than the one that has to be raised. Perhaps it's because the number of infected patients in Nakhon Si Thammarat province continues to rise every day. forcing others to take precautions to avoid being infected. In addition, the emergency operations center issued a statement ordering the closure of various localities. As such, prompting individuals to comply with directives and measures, such as avoiding congested areas (4.52 + 0.80) consistent with a study in Golestan Province, northern Iran, people would avoid going to crowded places [20], but the measure also found that there are still some behaviors that

people are not aware of to protect themselves from COVID-19. especially when wearing a mask or cloth mask. It was found that the mask was used only when coughing, sneezing, or having a cold (3.42+1.73) Not wearing a mask when leaving the house (3.56+1.55) Not wearing a mask when leaving home while sitting in a car with another person (3.67+1.62), which may increase the infection (3.67+1.62). This is consistent with a study in Golestan Province, northern Iran, where 25.2 people had never followed the measures [20], most of them touching, handing, or hugging another person. Because he is a close person (3.69 + 1.51) and uses the application Thai Cha Na to enter and exit the public (3.64 + 1.40), these behaviors have a reasonable proportion of behavior proportional to the behavior that must be The improvements are not much different. This is consistent with a study in the North Shoa Zone, Ethiopia, that found a small difference in the proportion of poor preventive behavior and good preventive behavior (55.2:44.8%) [16].

Sex characteristics with a statistically significant link were found in COVID-19 factors related to self-protection behaviors among people in Nakhon Si Thammarat Province. Female behavior is better than male behavior. This might be because three out of four responders were female, implying that supporting female health will have a higher level of resolve than encouraging male health. Females are more correctly conducted than males, which complements their sensitivity to conditions. This is in line with findings from research in Iran's Golestan Province, which revealed gender to be a significant factor in healthcare motivation [20].

The age factor: older people have greater self-protection behaviors than younger people, according to research. People aged 50–59 and 60 were found to have better behaviors than those aged 29.People in their 50s and 60s are nearing the conclusion of their working careers. There will be a duty to look after the family. In light of the COVID-19 outbreak, which has resulted in some income loss as a result of the requirements to comply with the measures, the province of Nakhon Si Thammarat requests collaboration. As a result, we understand how to avoid becoming infected with COVID-19. Because if there is an infection, it will not be able to do its job. Whereas the elderlyThere is a perception that if there is an infection, it will cause symptoms that are more severe than in other people. Thus, self-protection against COVID-19 is available, consistent with a study in Sierra Leone that found that people of working age are associated with adherence to COVID-19 prevention guidelines [21].

On the side of those who believe they are vulnerable That's accurate; there will be better behavior than at the current stage of development. This is because when individuals are aware of COVID-19, a severe disease that may be readily contactable, they are more likely to contact it. In addition, international relations are centered around the COVID-19 illness, which has spread over the world. As a result, people are better capable of self-defense. This is in line with findings from research in Ethiopia's North Shoa Zone, which indicated that illness risk perception was linked to disease preventative behavior [16].

People with appropriate perceived severity had better behavior than people at the level that needed to be improved. Perhaps because the severity of COVID-19 makes the infected person's life dangerous.As in many countries, the number of deaths is increasing. Thailand, including Nakhon Si Thammarat Province, discovered that the death toll has risen, particularly among the elderly and those with congenital disease.In addition, the public perceives the lack of medical services in terms of equipment to treat critically ill patients. causing people to become aware of the severity of the disease. As a result, people who are aware of the severity of the disease have appropriate behavior. This is consistent with a study in Kerala state, India that found that perceived violence was associated with behavior [15].

People who have the appropriate perceptions of barriers have better behavior and feel less pressured to improve. Perhaps because the government's recommendations for individuals to follow to avoid the spread of COVID-19 include steps that can prevent infection. Although some of the tactics are unsettling to certain people, the measure's advantages are still apparent. We should be able to carry out the measures, notwithstanding certain practical difficulties. This is in line with findings from research in Kerala, India, that showed perceived obstacles to be linked to behavior [15], as well as studies in Golestan Province, Northern Iran, that found perceived barriers to be inversely linked to behavior. [20] Perceived obstacles to illness prevention were linked to preventative actions in research conducted in Ethiopia's North Shoa Zone [16]. Similarly, research in Addis Ababa, Ethiopia indicated that people in Addis Ababa, Ethiopia exhibited self-defense activities in response to perceived aggression [17].

V. CONCLUSION

According to the study, COVID-19 self-protection behaviors are linked to health belief patterns. As a result, health beliefs should be developed to be universal. It emphasizes the importance of those who are involved in publicizing or developing strategies to increase public awareness of illness risk. The health belief model should be gender-appropriate to understand the advantages of disease prevention and the perceived barriers to disease prevention. as well as the people's age. Because there is a link between COVID-19 and self-defense behavior, Furthermore, the concept of health literacy about COVID-19 should be described using a health belief model in the context of the southern area, where the patients were in the top 10 provinces out of five provinces.

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