



# Social support needs of the older persons during the second wave of COVID-19 pandemic in semi-rural Thailand

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## Abstract

**Objectives:** COVID-19 is an emerging infectious disease; infected older persons are more likely to depart than other ages. Also, people with a lack of social support can get the infection easily. This study aimed to examine the social support needs of older persons and compare the differences in the social support needs by factors of age, sex, occupation, underlying medical conditions, marital status, and family economic status.

**Study design:** Descriptive study design.

**Methods:** Data were collected from 267 older persons who lived in semi-rural Thailand during the second wave of the COVID-19 pandemic by a self-administered questionnaire or face-to-face interviews. The data were analyzed using descriptive statistics, an independent sample t-test, and one-way ANOVA.

**Results:** All participants required social support, while 56.2% needed a high level. The top three aspects needed include distributing the old-age allowance in the community (86.9%), supporting disease prevention equipment (83.1%), and providing a place to coordinate and a person who could provide information about COVID-19 thoroughly in the community (80.1%). Older persons with underlying medical conditions needed significantly higher social support than those without diseases ( $p < .001$ ). Statistically insignificant differences in social support needs ( $p = .86$ ) are found by sex ( $p = .83$ ), occupation ( $p = .52$ ), marital status ( $p = .56$ ), and family economic status ( $p = .94$ ).

**Conclusions:** The overall social support needs of the participants were at a high level. Increasing old-age allowance and supporting protective materials, coordinating sources, and providing information about COVID-19 thoroughly in the community, and the tailored care delivery for those underlying medical conditions are recommended.

**Keywords:** COVID-19, older person, semi-rural, social support

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## 1. Introduction

COVID-19 is an emerging infectious disease caused by the coronavirus. It all started in Wuhan, China, where the outbreak spread rapidly across the world. Populations of all ages are equally inclined to infection but infected older persons are more likely to depart than other ages due to their unhealthy physical condition and reduced immunity, especially the older persons with underlying diseases such as diabetes, high blood pressure, chronic lung problems, and kidney disease, cardiovascular disease, cancer, and much more [1]. In 2020, Lim *et al.* [2] reported the situations of COVID-19 among older people in Asia and found that the mortality was higher in the older age groups,  $\geq 80$  and 65 – 79 age groups compared with the 50 – 64 age group (18.8% vs. 4.5% vs. 1.2%,  $p = .025$ ). Similarly, the mortality rate due to COVID-19 from the first wave of outbreaks among older persons in Thailand was higher than in other ages, accounting for 11.06 percent of the total number of infections in all ages, and the death rate among patients over 60 was 6.4% [3]. This figure calls for actions from public authorities worldwide to support older persons to meet their needs and

manage their health issues more effectively.

To comply with the COVID-19 strategic management policies, older persons, therefore, have to abide by several intensive measures for monitoring themselves and others, such as social distancing, mask-wearing, self-quarantine, and self-isolation. These measures also cause a direct negative impact on older persons physically, morbidly, economically, and socially [4]. Moreover, the natural spread and transmission of the disease had made it difficult for older persons to take care of themselves differently from the usual ways. For example, they may have to be separated from their family members, or they have to talk, communicate or touch each other less. These social isolations have raised the issue of whether older persons receive adequate social support in response to their needs.

Based on previous literature, social support is referred to as support that is provided by other people and arises within the context of interpersonal relationships [5]. Different kinds of social support include instrumental/material, informational, emotional support, and so forth [5-7]. These are potential resources for people during crisis or stress. Previous epidemiological studies found that people with a lack of social support can easily get the infection due to endocrine changes and reduced immu-

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nity [6-8]. Also, a recent study in China [9] revealed that social support moderated the relationship between perceived uncontrollability and mental health symptoms during the COVID-19 epidemic among the general Chinese population. The literature review has limited reports exploring the need for social support among older persons during the COVID-19 pandemic in rural Thailand. Hence, this study will provide information on the actual social support needs of older persons according to their lifestyles and contexts in a semi-rural community in Thailand. The findings may be useful for the public authorities to design further social support and support systems appropriate for this population group.

## 2. Method

The research design was a descriptive study. The population was 156,470 people [10], aged over 60 years old, who were selected by multistage sampling method. The research setting was Nakhon Pathom province, a semi-rural area in the central of Thailand sixty-five (65) kilometers away from Bangkok Metropolitan. During the second wave of the COVID-19 epidemic in Thailand, the impact of the situation among the older population in this area differs from rural and urban in terms of social support needs [11]. For the sample selection procedure, first, randomized 3 districts out of 7 by simple random sampling; second, randomized 1-2 sub-districts from 3 main districts by simple random samplings; and third, drew a simple random sample of the 66-67 older persons from each sub-district.

The sample size was calculated using a power analysis computer program. The correlation of selected factors with individual needs for social support was tested using one-way ANOVA statistics. The test power was set at 0.90, while the effect size was set at 0.25 (medium effect size). There were six primary variables with a statistical significance of 0.05. The sample in this study was 267 participants [12].

### 2.1 Inclusion criteria

The community-dwelling older persons who participated in the research had the following qualifications:

1. Aged 60 years old or over;
2. Residing in Nakhon Pathom Province during the COVID-19 pandemic for at least 6 months;
3. Good consciousness and ability to communicate in the Thai language;
4. No serious illness/es or bedridden or handicapped; and
5. Consenting to participate in the study

### 2.2 Research instrument

The questionnaire on social support needs contained ten (10) items to assess both perceived objective and self-report subjective with yes or no scales that comprised one (1) item for overall social support needs and nine (9) items of three (3) aspects. These included six (6) items in the material aspect, two (2) items in mental aspect, and one (1) item in the information aspect. The score of social support needs ranged from 0 to 10. After calculating the score of all items, the researcher compared

the scores with the standard criteria as follows: 0 – 5 points ( $\leq 59\%$ ) means low support need, 6 – 7 points (60–79%) means moderate support need, and 8 – 10 points ( $\geq 80\%$ ) means high support need.

The construct validity of all questions has been verified by three (3) experts, two (2) nursing instructors, and one (1) associate professor who specializes in measurement and evaluation. The index of Item-Objective Congruence (IOC) was 0.85. The reliability test of the assessment with thirty (30) samples yielded Cronbach's alpha coefficient of 0.89. However, the actual Cronbach's alpha coefficient was 0.94.

Data were collected by a self-administered questionnaire or face-to-face interviews. The seven (7) researchers and all participants have to abide by the strict epidemic prevention measures. For participants with impaired vision and/or unable to read, the questions were read out by the researchers, then answers were recorded respectively. Data collection was conducted from late March to April 2021. The data were analyzed by descriptive statistics. T-test was used to compare the gender, occupation, medical conditions, and family economic factors with social support needs, and one-way ANOVA was applied to compare age and underlying medical conditions with social support needs.

## 3. Results

### 3.1 Response rate

The questionnaires were distributed to 267 participants and 100% were returned. The personal data were kept confidential to protect the human rights of older persons.

### 3.2 Personal attribute

The participants aged between 60 – 81 years old and the average age was 71.4 years (SD = 8.4). About half were early seniors (60 – 69 years old) (47.9%), and about one in six were late seniors (80 years old and above) (16.9%). About eight in ten of participated in the study were female (76.8%), while two in ten were male (23.2%), of which half of them were married (56.2%). More than half were still self-employed (66.7%). Most of them were categorized at low family economic status (84.2%). In addition, most of the participants had underlying medical conditions (75.7%).

### 3.3 Social support needs

All participants (100%) needed social support. 56.2% of them had a high need for social support, 26.2% had a low need for social support. After considering each aspect, it was found that 80.2% had a need for these three (3) aspects-materials, psychological and informational supports. The top three social support needs were distributing the old-age allowance directly instead of receiving the money by oneself at the local administrative office or transferring it to bank account (86.9%), followed by encouraging government agencies to help procure disease prevention equipment such as cloth masks, surgical masks, alcohol solution or alcohol gel (83.1%), and providing a coordination unit as well as an information center about COVID-19 thoroughly in the community (80.1%), and having ways

**Table 1.** Social support needs of older persons (n = 267).

Social Support Needs	Frequency	Percentage
<b>Material aspects</b>		
1. The older adults wanted the government agencies to provide dried food, canned food, or fresh food for their consumption.	58	21.7
2. The older adults wanted the government agencies to provide cooked food for their consumption.	111	41.6
3. The older adults wanted the government agencies to provide them a safe shelter free from COVID-19 outbreak.	33	12.4
4. The older adults wanted the government agencies to distribute old-age allowance directly to them instead of bank transfer or receiving the money at the Subdistrict Administrative Organization (SAO).	232	86.9
5. The older adults wanted the government agencies to procure disease prevention equipment such as cloth masks, surgical masks, alcohol spray, or alcohol gel.	222	83.1
6. The older adults wanted the government agencies to provide home health services such as primary health checkups, dissemination of health education practices such as wound care, physical rehabilitation, and directly distribute prescribed medications individually.	44	16.5
<b>Psychological aspects</b>		
1. The older adults wanted to have channels in expressing their inner feelings such as fear, stress, loneliness, or depression.	139	52.1
2. The older adults wanted to have friends or elderly club members to talk or stay with them at some point in time.	80	30.0
<b>Informational support</b>		
1. The older adults wanted to have a reliable source of information about COVID-19 in their community.	214	80.1

for expressing inner feelings such as fear, stress, loneliness, depression (52.1%), as shown in Table 1.

#### 4. Personal Attributes and Social Support Needs

The results showed that the participants with medical conditions had a greater need for social support than those without any medical conditions statistically ( $p < .001$ ). Although the sample group had different factors including age, gender, occupation, marital status, and family economic status, all had the same level of needs for social support as shown in Table 2 and Table 3.

#### 5. Discussion

The participants were older persons, in the early, middle, and advanced ages. There were more females than males which were consistent with the population structure in Nakhon Pathom Province with a population aged 60 years and over representing 17.0%, 9.8% of females, and 7.2% of male [10]. Even though most of the participants had underlying chronic diseases, they were still healthy and able to carry out things on their own. It was found that 66.7% were able to run their own business and continue their jobs, who had some insufficient family economic status which is consistent with the situation in other areas across the country where people are facing problems with insufficient funds. This finding was similar to the study in Singapore, in which 27.0% of older women and 22.0% of older men reported having no savings at all [13]. The result was also consistent with the report of the Asian Development Bank in 2020 stating that around 40.0% of older men and 22.0% of older women proposed their source of income from their work [14]. The insufficient income of older persons makes them a more vulnerable population group, which was observed in the previous study which found that the precariousness of older adults' financial

statuses was associated with the experience of psychological distress [15].

The results showed that all participants (100%) needed social support, of which material support was greatly required than any other aspects. The research revealed that the need for material support was a fundamental factor in the prevention of COVID-19, whether cloth masks, surgical masks, alcohol solution or gel. It was possible that the participants and their families had limited access to buying those kinds of stuff during the epidemic in Thailand, which made them need support in this aspect the most. During the first wave of pandemics, Thailand faced a shortage of these equipment and price issues. Moreover, with a new or the second wave of pandemics, the participants were in high demand for these kinds of stuff.

As for distributing the old-age allowance directly instead of receiving the money by oneself at the local administrative offices or transferring to bank account, it was explained that the participants had the main income from the old-age allowance, which was inconsistent with the expenses. In this study, most older persons received income from the old age allowance-600 Baht for those of 60–69 years old, 700 Baht for those of 70–79 years old, 800 Baht for those of 80–89 years old, and 1,000 Baht for those over the age of 90. This finding was consistent with the report that old age allowance is the source of income 23.0% of women and 17.0% of men in Thailand [14]. The total value of the allowance which is fewer than 2-day minimum wage of 345 Baht per day was inadequate that prompted most of the participants to still run their own business, agriculture, fishing, etc.

Even though the sample group is still engaged in a certain occupation, with the current outbreak and the need to comply with measures to prevent infection and the spread of COVID-19, they were reluctant to come to the local administrative office and receive their old-age allowance, even going to the cash machine or withdrawing money from the bank. Furthermore,

**Table 2.** Comparison of social support needs with ANOVA statistics (n = 267).

Variable / Variance Source	Sum of Square	df	Mean Square	F-test	p-value
<b>Age</b>					
among groups	1.5	2	.8	.2	.86
within groups	1349.8	264	5.1		
total	1351.3	266			
<b>Marital status</b>					
among groups	5.9	2	3.0	.6	.56
within groups	1345.3	264	5.1		
total	1351.3	266			

**Table 3.** Comparison of social support needs by t-test (n = 267).

Variable	Mean	S.D.	t-test	df	p-value
<b>Gender</b>					
female	6.8	1.6	.2	1	.83
male	6.8	1.5			
<b>Occupation</b>					
self-employed	6.7	2.3	.7	1	.52
unemployed / retired	6.9	2.0			
<b>Medical Conditions</b>					
no	3.6	1.7	22.1	1	< .001
yes	7.8	1.2			
<b>Family Economic Status</b>					
sufficient	6.8	2.2	.7	1	.94
insufficient	6.8	2.3			

during the second wave of the pandemic, public transport in semi-rural communities was limited especially on the COVID-19 prevention policy, even those with private vehicles. Therefore, the respondents preferred the Thai government to let the community leaders distribute the subsistence allowance directly to them.

Apart from that, the results also showed that most of the participants were reluctant to be provided health services at home, e.g., primary health checks, wound care, physical therapy, and medications dispensing for their underlying diseases. The reasons was participants did not want to allow outsiders to visit their homes due to the fear of the spread of COVID-19 [2]. In addition, the sample group did not need the government agencies to help them with dry food, canned goods, and ready meals since they were not compatible with their way of life. The main livelihood of the participants was the consumption of fresh food, vegetables, and fruits that were home-grown and could be obtained from around the community. These individuals preferred to follow their personal eating patterns and did not want to mingle with other people if it was not essential. In addition, the samples also lived in an agricultural area in which fruits and vegetables were in abundance [10]. Therefore, finding food within the households or communities was not a problem.

Besides, the results showed that the participants needed a center for coordinating and providing information about COVID-19 in the community, since Nakhon Pathom Province was the province where the first older patients with COVID-19 were found [16]. Although the government has conducted

a press conference and provided information about COVID-19 to the public through online media, local radio, and television every week, there might still be limitations on the older persons' access to information. According to the semi-rural culture, the older persons were more likely to trust information from community health teams or community leaders than from news on the radio, television, or from other people. Inadequate information related to COVID-19 infection could affect the seniors psychologically and create fears. A previous study revealed that feelings of frustration and uncertainty tend to occur even on the concerns of inadequate information and basic supplies [17-18], and the need to better understand the elements of national responses through a resilience lens as proposed in the recent research [19].

Older people with medical conditions infected with coronavirus would most likely have more severe symptoms compared to other ages [1, 6, 9, 15, 17]. The results revealed that the participants with certain medical conditions had a greater need for social support than those without any conditions, which were congruent with several previous studies. The need for social support on materials such as preventive equipment, psychological assistance, and information support depended on those who need it the most. These were consistent with the overall picture of Thailand which was found that older persons with medical conditions are at high risk of getting severe symptoms once infected [3]. To mitigate the situation, the government was implementing drug distribution reinforcement by the village health volunteers or postal services directly to the patient's home.

Lastly, although the participants were of different ages, gender, occupation, marital status, and family economic status, they had similar social support needs. This could be explained by the fact that COVID-19 is an emerging infectious disease that affects everyone without exceptions, as mentioned in previous studies [1, 4, 13]. The findings in this study were opposed to various ASEAN countries [2] which proposed that people with low-socioeconomic status were less likely to receive preventive materials from the government and those staying alone often relied on ad-hoc support from non-government organizations (NGOs) and volunteers than the general population [1]. According to Thai culture, especially in a rural community, daughters or sons are usually responsible for taking care of older family members. Moreover, the extended family with relatives living in the same village might help to support each other, and the older people are generally well-respected according to Thai culture. This was in line with previous studies that found 48.8% of the family members, a daughter or son, were the closest helpers for their family when getting acute disease [20]. In addition, the health volunteers, more than one (1) million volunteers [14] are working in the community nationwide to take care of the housebound older people. However, this finding might have different results in another context. The strength of the study was the high response rate covering wide ranges of older ages and face-to-face data collection which was rich in data related to a semi-rural community. The weakness of the study was the question about the information aspect which was just only one question.

## 6. Conclusion

The overall social support needs of older persons in semi-rural Thailand were at a high level. The findings of this study indicated that materials on the aspects of preventive equipment and old-age allowance were also at a high level of need. It was also showed that a channel for older persons to express their inner feelings like fears, stress, loneliness, and depression was required. Moreover, most of older persons need a center for coordinating and provide information about COVID-19 in the community. Older persons with medical conditions need more social support than those without any.

## 7. Recommendation

### 7.1 Suggestions from study findings

Public authorities should consider more on old-age allowance and facilitate the distribution in the community. Government agencies should provide targeted and tailored messages according to the most reliable scientific evidence within the area organized by community leaders or village health volunteers.

Moreover, the tailored older caring program should focus on developing their potential for self-care and encouraging family members or people in the same community to become a supporter. Mental health or public health agencies should consider strategies for older persons who needed to express bad feelings, such as establishing virtual counseling center or organizing online group psychological activities.

### 7.2 Suggestions for the further study

The experimental studies should be conducted, and also mixed-method design to understand more on older persons' needs, design a new normal life policy for active aging, and develop a program to strengthen family leadership development of older persons with mental health problems.

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### Ethical approval

This study is part of a research project on the quality of life of older persons during the second wave of the COVID-19 pandemic in Nakhon Pathom Province, accredited for human research ethics of the Human Research Ethics Committee, Nakhon Pathom Rajabhat University with a certification number of COA No. 070/2021 on March 18, 2021.

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### Competing interests

None declared

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