





### SITUATION OF THE THAI **OLDER PERSONS**

2021



# SITUATION OF THE THAI OLDER PERSONS 2021

### Preface

In every population, the older generation is an important group of people who need to take special care of themselves. Especially during the COVID-19 pandemic over the past two years, there has been special consideration for the vulnerability and needs of older persons. Epidemiological studies worldwide have firmly established that risk of illness and death from COVID-19 increases with advanced age, other things being equal. It is also important to note that some older persons who remain in good health may be less vulnerable to COVID-19 infection complications than younger persons who have underlying conditions or engage in risky behavior, such as frequenting indoor nightlife establishments with crowds and poor ventilation. That said, lower-income older persons who reside in cities may be forced to live in densely populated settlements and domiciles which, in turn, amplifies their risk of COVID-19, even if they spend most of their time at home. Those examples present a small window into the complexity of the health problems of older persons, whether in the presence of a pandemic or not.

This Report on the Situation of Thai Older Persons in 2021 is the second edition with a special section on the impact of COVID-19 on Thai older persons. The pandemic remains an important theme, as it exposes the vulnerability and inequality of the older generation in societies around the world, and policymakers and the general public need to be more fully aware of how Covid can erode the quality of life of older persons. Therefore, this 2021 report should be most beneficial to all parties concerned as Thailand continues its effort to contain and control outbreaks, and the virus mutates into more transmissible variants. We can clearly see how COVID-19 has severely impacted the basic living conditions of many people in society, even to the extent that a grim saying has emerged: "Some fear they will die of starvation before dying of COVID-19." This Report on the Situation of Thai Older Persons in 2021 hopes to reflect the perspective of Thai older persons, based on quantitative and qualitative data conducted by various agencies and researchers around the country.

The production of this series of annual reports on the Situation of Thai Older Persons is the mandate of the National Committee on Older Persons, and each year the report is presented to the Cabinet as a component of the policy review and formulation mechanism, and as the situation relates to the development of the country as a whole. The report provides an update on Thailand's rapidly evolving demographic profile, as the country transitions into an increasingly "aged society." This transition has immense implications for public policy and determining the direction of the country's development. Indeed, there remain too many myths and misunderstandings about the contribution or role of older persons in society and the economy. It is of the utmost importance that Thai older persons not be viewed as a barrier to development but, instead, as a golden opportunity to help the country continue to grow and thrive economically, socially, and culturally. Thai society must adopt the mindset that the older generation can still have and deserves quality of life, and they should be valued and respected for their skills, experience, and economic potential.

The 2003 Older Persons Act stipulates that a Report on the Situation of Thai Older Persons be presented to the Cabinet for consideration each year. To that end, the Foundation of Thai Gerontology Research and Development Institute (TGRI), the National Committee on Older Persons, and the Department of Older Persons collaborate to make this report possible. The information for each report draws upon data and expertise from various sectors of society, especially at the policy level, whether it be the Cabinet, the Parliament, or agencies and entities working on issues related to older persons. The aim is to improve understanding of the situation and the challenges ahead. The reports are written in a very colorful and easy-to-read format so that people in the general population can read the report and understand the content. These reports can be used by civil society organizations and older persons themselves to empower the growing population of Thai older persons. The ultimate goal is that Thai society is a welcoming place for older persons, which helps them to live a quality life with dignity and purpose, and encourages older persons who are able and willing to continue to be gainfully employed for as long as they can. The realization of this vision requires the collaboration and cooperation of all related parties to organize a system that will help people in society to prepare now for advanced aging so that no one feels like they are a burden on a relative, the neighbors, the community, or society at large.

The TGRI, in its capacity as assigned by the National Committee on Older Persons, would like to express sincere thanks to all contributors who have participated in the production of this latest edition of the Report on the Situation of Thai Older Persons. It is quite an achievement to compile, analyze, interpret, and synthesize such a large body of data and information, and to present it in such a readable form and format. The annual report consists of two main parts. The first part draws upon the work of the relevant government agencies or entities, including organizations that work to improve the quality of life of older persons, or which develop policies, structures, and systems to accommodate and support Thailand's ageing society. The other part of the report is produced by a team of academics who gather, interpret, synthesize, and distill all the relevant information into a concise, informative, and comprehensive discussion. The language used is not overly technical so that any layperson can grasp and remember the core content. It uses colorful graphics and figures which can be easily reproduced to educate small or large groups about the situation. The report also provides relevant policy recommendations that reflect the changing situation of older persons.

The TGRI would like to thank the academic team from the Institute for Population and Social Research of Mahidol University, led by Professor Emeritus Dr. Pramote Prasartkul, who has mobilized the new generation of academics to collaborate with the TGRI, and the team of specialists and resource persons, including members of the National Committee on Older Persons. It is sincerely hoped that the Report on the Situation of Thai Older Persons in 2021 is useful and valuable for all readers. It is also hoped that the special theme on COVID-19 and older persons helps tell the story of how this important segment of the population is impacted and how they are coping. These themes also dovetail with the importance of the latest innovations and inventions in digital technology, and how that is becoming increasingly important, especially during a calamity such as the COVID-19 pandemic. Dedicated Thai professionals in many sectors and around the country are working together to create systems, policies, activities, and work guidelines that are appropriate and beneficial for the aged society, which Thailand is rapidly becoming.



Somsak Chunharas, M.D.

President, Foundation of Thai Gerontology Research and Development Institute (TGRI)

# Executive Summary and Recommendations

### The Population of Older Persons in the World

Population ageing is a worldwide phenomenon, and has become even more pronounced during this past decade. Many developed countries have become complete aged societies, while developing countries are rapidly heading in that direction due to steady declines in birth rates and increased longevity.

The world's population is ageing rapidly. In 2021, the global population was 7.875 billion people, of which 1.082 billion were aged 60 years or older; that is, 14% of the world's population are "older persons."

The number of "old-old" (aged 80 years or over) totaled 151 million, or 2% of the world's population.

By 2021, Europe and North America are classified as complete aged societies, since the proportion of older persons is 20% or more. Most other parts of the world are becoming aged societies, except for Africa, which is the only continent that is still a relatively young society, i.e., its proportion of older persons is less than 10% of the population.

The countries in the world with the highest rates of older persons as a percent of the population are Japan (35%), Italy (30%), and Portugal (30%).

2.

### The Population of Older Persons in ASEAN

In 2021, the group of ten ASEAN member countries had a combined total population of 671 million.

As a whole, ASEAN is already an aged society, as 11% of the total population were aged 60 years or older.

The number of the old-old (aged 80 years or over) has grown sharply, from 7.6 million in 2020 to 8.6 million in 2021, a 13% increase.

By 2021, seven ASEAN member countries were already an aged society by having 10% or more of their populations aged 60 years or older: Singapore (22%), Thailand (19%), Viet Nam (13%), Malaysia (11%), Indonesia (10%), Myanmar (10%) and Brunei (10%).

### The Population of Older Persons in Thailand

In 2021, Thailand had a total population of 66.7 million. The population of Thai older persons has grown very rapidly. A half-century ago, Thailand had an older population of fewer than two million persons. By 2021, the number of older persons will have increased to 12.5 million, or 19% of the total population.

Thailand is about to become a "complete aged society" by 2022 when at least 20% of the population is aged 60 years or older.

Over the next 20 years, the total population of Thailand will increase more slowly until it reaches zero growth, and then begins to have population decline. Despite that remarkable demographic milestone, the population of Thai older persons will increase rapidly. Indeed, the population of the oldest cohorts will grow most rapidly. The population of all older persons aged 60 years or older is projected to increase by an average of 4% per year, while the population aged 80 years or older will increase at an average rate of 7% per year.

#### COVID-19 and Thai Older Persons in 2021

In 2021, the COVID-19 pandemic continued to spread in Thailand, and this disease disproportionately attacks older persons. Since its emergence in early 2020, COVID-19 has undermined nearly every aspect of Thai society, economy, health, and well-being of the population, but especially older persons who are the most fragile group of adults.

In 2021, COVID-19 infected 182,950 older persons, accounting for 11% of all cases in Thailand throughout the year. At the same time, 14,597 older persons died from COVID-19 in 2021, accounting for 70% of all COVID-19 deaths in that year.

Even if they have not been infected or ill from COVID-19, the pandemic and its containment measures have made life miserable for millions of older Thais. Thai older persons suddenly could not earn income as they had before, they could not socialize with peers and neighbors outside the home, they had to care for dependent grandchildren whose schools had been closed, and they could not make optimal use of the Internet and modern communication technology due to their lack of knowledge and skills in using digital equipment. This had the effect of cutting Thai older persons off from their familiar society and from government assistance programs.

### Policy Recommendations Based on the Situation of Thai Older Persons in 2021

Based on the information and data on the Situation of Thai Older Persons in 2021, the editors offer the following recommendations on different policy issues:

Issue #1: The changing age structure of the Thai population is causing a radical decrease in the working-age population while expanding the number and proportion of older people, and these demographic phenomena will continue for many years into the future:

- (1) There should be a review and possible revision of the threshold when a person is considered "older persons." Similarly, there should be serious consideration of raising the mandatory retirement age from 60 to a higher age in both the public and private sectors, which may entail amending some laws.
- (2) There should be consideration of extending the time when a person begins to receive older-age benefits from the Social Security Fund. For example, the threshold age could be raised from the original 55 to 60 years to allow and motivate the insured to spend more time in the formal labor force.

(3) The government should consider importing skilled and semi-skilled labor from neighboring countries and developing countries that are systematically friendly to Thailand and stand on the principle of regional partnership and solidarity. This is one strategy to make up for the reduction in the number of Thais in the prime working-age years.

**Issue #2:** Preparing Thai society to accommodate the coming "demographic tsunami" of older persons:

- (1) It is recommended to support and develop skills of people of all age groups, especially the skills of the working-age population and older persons under the concept of "lifelong learning."
- (2) There should be more promotion for local administrative organizations (LAOs), communities, private businesses, and establishments to employ older persons for all suitable jobs. Some relevant laws may need to be amended.
- (3) There should be the motivation for older persons to stay gainfully employed by using flexible work arrangements that are suitable for the needs and conditions according to the age of the labor force.
- (4) There should be the motivation for employers to extend benefits to their workers who are older persons, and retain and employ older workers.
- (5) There should be more development in the use of technology to increase the productivity of the working-age population and employees who are older persons.

**Issue #3:** Mitigating the impact of the COVID-19 pandemic on older persons:

- (1) The editors recommend accelerating the provision of accurate information and knowledge to older persons and their caregivers. In particular, there should be information about the potential benefits and/or side effects of getting the COVID-19 vaccine. This information could be delivered through a variety of communication channels. This will help increase the health potential of older persons through the concept of promoting health literacy.
- (2) There should be a "fake news" management system in regard to COVID-19 in social media to reduce misinforming older persons.
- (3) The editors recommend the development of a system for postal medicine delivery and medicine pick-up near home. This strategy for increased access includes providing resupply of essential medicines and medical supplies for managing chronic non-communicable diseases (NCDs) at pharmacies, and through Tambon Health Promotion Hospitals (THPH) and district hospitals. There should be more use of telemedicine/telehealth to reach older persons as part of the standard benefits in every public health insurance scheme for all Thais. This will also lead to the improvement of primary care and self-care systems to promote energetic and healthy ageing. Such a system should be used to increase the convenience of accessing services without compromising the quality of treatment.

- (4) Authorities should consider increasing manpower and building the capacity of volunteers and community caregivers who provide services in long-term eldercare by establishing an information system, and providing appropriate rewards or compensation for both formal and informal forms of care for older persons.
- (5) There should be more opportunities for social enterprises and non-profit business groups to help the government and communities in developing innovative models of care for older persons who are dependent (e.g., confined to the home or bed) with appropriate compensation and support systems.

**Issue #4:** Promoting older persons to live in their homes and familiar settings as long as they can have an acceptable level of quality of life:

- (1) The editors recommend promoting the concept of 'ageing in place,' which means enabling older persons to remain in their home, ideally with the extended family, in a familiar community, and familiar environment as long as possible and as long as there is at least a minimum quality of life. This may involve adapting the home or constructing of facilities and amenities that are age-friendly.
- (2) There should be advocacy for LAOs, public benefit organizations, educational institutions, and large private businesses that want to practice corporate social responsibility to renovate housing for older persons and help construct amenities in the community to support ageing in place and promote the concept of "having a safe home and shelter."

- (3) LAOs and home communities should make it their mission to improve the environment to accommodate older persons and arrange public services, especially public transportation, that facilitate activities and movement outside of the home for older persons.
- (4) There need to be more efforts to raise the standard of living of older persons, by both public and private entities, and help older persons who need to transition to an assisted-living facility, or creation of social service centers for older persons under the supervision of the LAO.

**Issue #5:** Older persons need to have a secure and sustainable income:

- (1) The editors recommend that there be systematic programs to help people plan and save for a stable income in their retirement and "sunset years." This would include strategies and guidance on how to live frugally in daily life.
- (2) There should be an amendment to the National Savings Law to be more flexible and cover workers in every system. This is needed to create consistent and universal savings, regardless of the socio-economic status of the individual. This includes introducing incentives for the working-age population and those on the verge of retirement to maximize their savings for what could be a prolonged period of retirement.
- (3) There should be greater attention to the development of the universal pension system to ensure that older persons can keep pace with the rising cost of living.

Issue #6: Promoting digital equity for all ages

- (1) There should be the provision of basic welfare in digital technology for an ageing society, such as providing free Wi-Fi coverage in all areas with population settlements to enable access and use of digital technology, and the ability to have online contact with the agencies that provide welfare assistance from the government. Older persons also need digital access to learn about the latest innovations and methods of improving their health and quality of life.
- (2) There should be an effort to improve the quality of life and stability of older persons through the development of a health care system that builds upon technology to reach older persons who are not near a healthcare or clinical facility (e.g., telehealth/telemedicine). This concept includes the establishment of an "online incubator" to support secondary career development for older persons and doing business online. There should be ready-made digital marketing platforms to serve entrepreneurs who are older persons.
- (3) There should be a support system for the use of digital technology to improve the quality of life of older persons and all age groups. This could be implemented by the use of a volunteer mechanism to help and support older persons to maximize their use of digital technology to exercise their rights to full benefits from society and the state.
- (4) There should be more programs for improving IT literacy skills of older persons.

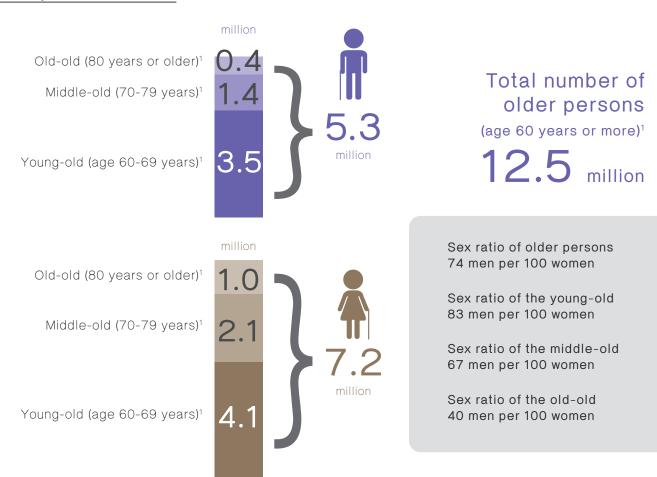


### Important Information and Statistics about Older Persons in 2021



Overall sex ratio: 93 men per 100 women

#### Older persons



### Life expectancy

	Men	Women	Both sex
Life expectancy at birth <sup>2</sup>	73.5 years	80.5 years	77.0 years
Life expectancy at age 60 years <sup>2</sup>	17.4 years	23.2 years	20.3 years

### Residents in an assisted living facility for older persons

	2020	2021
Under the administration of the LAO <sup>3</sup>	965 persons	910 persons
Under the administration of the MSDHS <sup>4</sup>	1,293 persons	1,286 persons

### Aged care providers under government welfare

	2020	2021
Village Health Volunteers (VHV)5	1,027,036 persons	1,039,729 persons
MSDHS Volunteers (specialists in geriatric care) <sup>4</sup>	24,293 persons	44,807 persons
Caregiver <sup>6</sup>	86,829 persons	94,968 persons
Care manager <sup>6</sup>	13,615 persons	15,114 persons
Community aged care volunteer <sup>7</sup>	13,190 persons	13,387 persons

### State financial support for older persons

	2020	2021
Older persons with old-age allowance <sup>11</sup>	9,663,169 persons 76,280 million baht	10,488,013 persons 79,300 million baht
Older persons with a government pension <sup>12</sup>	803,293 persons 267,012 million baht	792,581 persons 264,904 million baht
Pensioner (lump sum payment) under Articles 33 and 39 <sup>13</sup>	267,843 persons 10,758 million baht	315,566 persons 12,142 million baht
Pensioner under Article 40 <sup>13</sup>	22,880 persons 83.42 million baht	23,406 persons 96.51 million baht
Pensioner (installment payments) under Articles 33 and 39 <sup>13</sup>	295,981 persons 8,192.80 million baht	390,950 persons 11,734.51 million baht
Social Security System pensioner <sup>13</sup> (Articles 33, 39, and 40)	1,016,015 persons	1,744,511 persons
Older persons who are members of the National Savings Fund <sup>14</sup>	81,243 persons 3.4% of the total members (2,369,543 persons)	81,252 persons 3.3% of the total members (2,453,968 persons)
Older persons with a state welfare card <sup>15</sup>	4,678,596 persons 3,349,870,504 baht (December 31, 2020)	4,814,228 persons 4,214,210,400 baht (September 30, 2021)
Support for funeral arrangements for older person's death according to tradition <sup>4</sup>	8,807 cases 20 million baht	7,000 cases 21 million baht

#### Indicators of health status of older persons

	Men	Women	Total
Dementia <sup>8</sup> (100 thousand population)	2.0	4.8	6.8
Bed-ridden <sup>9</sup>			46,779 persons

#### Clubs or group activities for older persons

	2020	2021
Senior Citizens club <sup>10</sup>	29,276 clubs	29,359 clubs
Senior Citizens school <sup>4</sup>	2,049 schools	2,327 schools
Center for Quality of Life Development and Occupational Support for Older Persons <sup>4</sup>	1,589 centers	1,589 centers



#### References

- 1 Office of the National Economic and Social Development Council. (2019). Report of the Population projections for Thailand 2010-2040 (Revised Edition). Bangkok: Office of the National Economic and Social Development Council.
- 2 Institute for Population and Social Research. Mahidol University (2021). *Mahidol Population Gazette 2021*. Nakhon Pathom: IPSR, Mahidol University, Retrieved from: https://ipsr.mahidol.ac.th/ipsrbeta/th/Gazette.aspx
- 3 Social Welfare Promotion Work Section, Department of Local Administration, Ministry of Interior
- 4 Department of Older Persons, Ministry of Social Development and Human Security
- 5 Department of Health Service Support, Ministry of Public Health
- 6 Department of Health, Ministry of Public Health
- 7 Department of Local Administration, Ministry of Interior
- 8 Calculated by Pramote Prasartkul and Kanchana Thienlai
- 9 Bureau of Eldery Health, Department of Health, Ministry of Public Health
- 10 Association of Senior Citizens of Thailand under the Patronage of Her Royal Highness Princess Maha Chakri Sirindhorn
- 11 Department of Local Government, Bangkok Metropolitan Administration, and Pattaya City, Ministry of Interior
- 12 Comptroller-General Department, Ministry of Finance
- 13 Research and Development Division, Social Security Office, Ministry of Labor
- 14 National Savings Fund
- 15 Ministry of Finance

#### Sources of Data

for Situation of the Thai Older Persons 2021

United Nations, 2019. World Population Prospects: The 2019 Revision produced by the United Nations. Population projections by age group and gender of countries around the world based on country census data.

**Population and Housing Census** operated by the National Statistical Office (NSO), counting all populations across the country every ten years ending in the number 0. Thailand's last population and housing census was in 2010.

**Civil registration** is operated by the Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior, and contains data on the number of residents in the country, and the number of births and deaths, reported as of December 31 of each year.

Report of the Population Projections for Thailand 2010-2040 (Revision) is prepared by the Office of the National Economic and Social Development Council (NESDC). The NESDC uses the population from the 2010 Population and Housing Census as the starting point to make population projections by age group and gender according to the changing trend conditions. The fertility, survival, and migration rates used are hypothetical.

The 2021 Survey of the Older Persons in Thailand is conducted by NSO, the first round of which was conducted in 1994. The 2021 round was the seventh survey which followed up with a sample of the population age 50 years or older, in 83,880 households. The sample is representative of the national older population. This report on the Situation of the Older Persons in Thailand 2021 presents only the data of the sample age 60 years and over from executive summary.

The 2021 Household Information and Communication Technology Use Survey, Q4 (October-December 2021), was conducted by the NSO. This survey was conducted for the first time in 2001 and, since 2003, it has been conducted on an annual basis. There is a quarterly survey to measure the number of people who use computers and the Internet, the characteristics and behavior of using various technological equipment, and the number of households with information technology equipment and communications potential such as landline phones, smart phones, fax machines, computers and household Internet connections

### **Table of Contents**

Preface	2
Executive Summary and Recommendations	5
Sources of Data for Situation of the Thai Older Persons 2021	15
Definition of "older persons"	18

#### Chapter 1: General Situation of Older Persons



22
24
26
28
32
33
34
37
40
41

#### Chapter 2: Thai Older Persons and COVID-19

(continued from the 2020 Report)

43

2.1 COVID-19 and Thai Older Persons in 2021	44
2.1.1 Older persons who have been infected with COVID-19	44
2.1.2 Deaths among older persons attributable to COVID-19	45
2.1.3 Older persons and the COVID-19 vaccine	46
2.1.4 Access to public health services for older persons	51
2.2 Access to Digital Technology for Thai Older Persons	
During COVID-19	53
2.2.1 Access to government assistance programs	
by older persons	53
2.2.2 Participation in and satisfaction with the government	
assistance measures by older persons	54
2.3 Adjusting and Access to Digital Applications for	
Thai Older Persons in 2021	56
2.3.1 Access to government assistance programs	
by older persons	56
2.3.2 Digital applications for government programs	
during COVID-19	56
2.3.3 Use of various Internet or smartphone applications	
by Thai older persons	58
2.4 Digital Equity for All Ages	59
2.5 Policy Recommendations for Promoting Digital Equity	62

## Chapter 3: Organized Activities in Support of Thai Older Persons



#### Chapte 4: Highlighted Situation in 2021



#### Chapter 5: Research on Thai Ageing Society in 2021



3.1	Measures of Assistance from Government Agencies to Assist Older Person	ons
	and Supplemental Measures to Lessen the Impact of COVID-19	66
	3.1.1 Economy and finance	66
	3.1.2 Mental wellbeing	67
	3.1.3 Social welfare and the promotion of lifelong learning	69
	3.1.4 Prevention and screening	70
	3.1.5 Treatment and care	71
3.2	General Measures in Support of Older Persons	72
	3.2.1 Department of Health, Ministry of Public Health	72
	3.2.2 Department of Health Service Support,	
	Ministry of Public Health	72
	3.2.3 Ministry of Social Development and Human Security	73
	3.2.4 Older Persons Fund	73
	3.2.5 Department of Older Persons,	
	Ministry of Social Development and Human Security	74
	3.2.6 Ministry of Labor	74
	3.2.7 Ministry of Culture	74

4.1 National Older Person for 2021	76
4.2 National Artists of the Year 2021	80
4.3 Standards for Care Centers in Thailand	84
4.4 Private Companies have More Projects to Employ	
the Older Persons	89
4.5 Survey of the Older Persons in Thailand 2021	92
4.6 Innovations and Inventions to Improve Quality of Life	
for Older Persons	95
4.7 TV Programs about and for Older Persons	100
4.8 Older Persons in the Media	101
4.8.1 Senior athletes	101
4.8.1 Senior influencers	103

106
108
se,
es,
110
112

References		115

### Definitions of



Currently, the United Nations does not have an exact definition of "Older Person." However, the United Nations uses age 60 years or over to present statistics, data, and indicators related to older persons. Most developed countries use the age of 65 years or over as the criterion for classifying someone as an "older person."

For Thailand, the definition of "older person" is defined in the Older Persons Act, 2003, Article 3:<sup>1</sup> "Older Person" means "a person who is sixty years of age or older and has Thai nationality."

"Older person" means a person aged 60 years or older

• The young-old: 60-69 years

• The middle-old: 70-79 years

• The old-old: 80 years or older

"Population of Older Persons:" The population aged 60 years or older

"Aged Society" and "Ageing Society" 2

The terms "aged society" and "ageing society" have the same meaning in this report, and can be used interchangeably.

Dr. Banloo Siriphanich, Honorary Chairperson of the TGRI, referred to the writings of Somdej Phra Buddhakosachan (P.A. Payutto) in the book titled "If we can age well, we should be an older person" with the observation that the Thai word for "age" (ayu) is derived from the Pali language, meaning "the power to nourish one's life," while the word "age" (wai) connotes "deterioration or dilapidated." Therefore, it was proposed to use the term "Sangkom soong ayu" to mean "a society with the power to sustain life" and avoid using the word "Sangkom soong wai" because it has a negative meaning that suggests a society that is decaying.

In this report on the Situation of Thai Older Persons in 2021, the term "aged society (Soong ayu)" will be used throughout.

- "Aged society" means a society in which the population aged 60 years or older is more than 10% of the total (or the population aged 65 years or older is more than 7%).
- "Complete-aged society" means a society in which the population aged 60 years or older is more than 20% of the total (or the population aged 65 years or older is more than 14%).
- "Super-aged society"<sup>2</sup> means a society in which the population aged 60 years or older is more than 28% of the total (or the population aged 65 years or older is more than 20%).
- "Ageing society"<sup>2</sup> refers to a society whose population is getting older on average, as indicated by the percent of the population that is in the group of older persons continues to grow.
- "Older person rate" means the percent of the total population that is an older person.
- "Population ageing" refers to a demographic phenomenon occurring with greater frequency in different countries worldwide over the past decade. This refers to the population in communities, territories, countries, and regions that are getting older, which can be observed from the proportion of the older population, or an increasing median age of the population in a closed or open population (excluding in/out-migration). Population ageing is caused by a decrease in births and an increase in the life expectancy of the population.

<sup>&</sup>quot;Ageism" refers to a negative bias or attitude toward an individual or group of people based on their age. Such bias can arise from negative beliefs, attitudes, values, or norms. This form of prejudice can easily lead to negative discrimination, such as not listening to the opinions of adolescents because they are seen as immature, or not accepting certain behaviors of older persons because of the attitude that such behavior is inappropriate for older persons. In general usage, "ageism" refers to the negative stigma against older persons simply because they are seen as slower, weaker, or less capable than the younger generation. This bias can easily transition to more punitive attitudes when older persons are seen as a burden on the family, the community, or society at large. When older persons are dependent on adult children for care and support, they can be seen as a drag on the ability of the working-age population to prosper and get ahead.

### International Older Persons Day for 2016 had the slogan "Take a Stand against Ageism".

"Active ageing" is a concept that implies that people can create opportunities for themselves, regardless of age or gender. Most people have the potential to grow older through life in a healthy way, and actively participate in the economy and society, with self-reliance, honor, and stability. Active ageing encourages everyone to improve the quality of their life, from birth until death.

"Productive ageing" is the process of harnessing the potential of people of all genders and ages to be able to produce useful and valuable products and/or services for themselves and/or others, regardless of whether the product or service will yield a monetary return.

"Healthy ageing" is the process of developing and maintaining the ability to perform activities in daily living that contribute to the self-reliance and well-being of older persons. Healthy ageing is facilitated by creating environments and opportunities that enable people to become and do what they consider valuable throughout their lives.

"Ageing in place" is a concept that focuses on living in the same home, neighborhood, or community by creating an environment that is conducive to physical and mental well-being, including emphasizing the importance of social services in various dimensions to be available at homes and communities to increase the conveniences and amenities for the population throughout their lives.

#### References:

- 1 Older Persons Act 2003. (2003, 31 December). Government Gazette.
- 2 Institute for Population and Social Research, Mahidol University. (2022). Glossary of Terms in Population and Social Research. Retrieved from: http://www.popterms.mahidol.ac.th/
- 3 The Royal Society. (2014). *Dictionary of Demographic Terms*. 1<sup>st</sup> printing. Bangkok: The Royal Society.



# General Situation of Older Persons

Ageing of the World's Population

On average, our world is an "aged society," with 1.082 billion persons aged 60 years or older, representing 13.7% of the total population.

The number of older persons in the world is 499 million men and 583 million women. The sex ratio is equal to 86 male older persons per 100 female older persons.

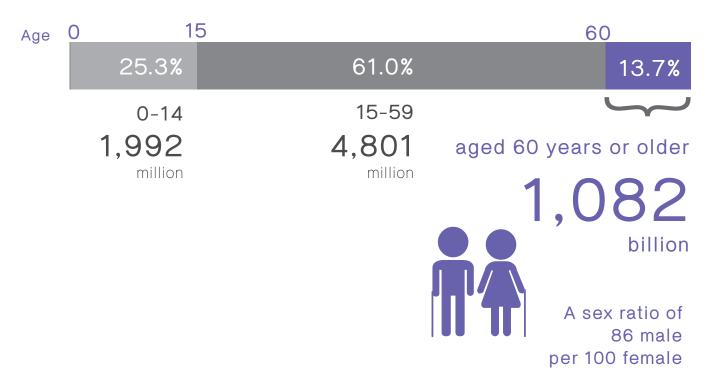
The old-old (aged 80 years or older) numbered 151 million people, or 1.9% of the world's population. The sex ratio is equal to 63 men who are old-old per 100 women who are old-old.

By 2021, the world had a population of

7,875
hillion.

A sex ratio of 102 males per 100 females

### Global Population by Age Group



Source: United Nations (2019)1

North America

Total population: 371 million

Distribution: 4.7%

Population age 60+ years: 87 million Population age 80+ years: 15 million Proportion of older persons: 23.5%

### "The populations of Europe and North America are already complete aged societies"

### Latin America and the Caribbean

Total population: 660 million

Distribution: 8.4%

Population age 60+ years: 88 million Population age 80+ years: 13 million Proportion of older persons: 13.3% Almost every region of the world has become an aged society with the exception of Africa, which still has a relatively young population due to persistently high birth rates and lower life expectancy.

Among continents, Europe had the highest rate of older persons (aged 60 years or older) at 26.1%, and North America had the second highest rate of older persons, at 23.5%.



Total population: 748 million

Distribution: 9.5%

Population age 60+ years: 195 million Population age 80+ years: 40 million Proportion of older persons: 26.1%

#### Asia

Total population: 4,680 million

Distribution: 59.5%

Population age 60+ years: 627 million Population age 80+ years: 75 million Proportion of older persons: 13.4%

#### Oceania

Total population: 43 million

Distribution: 0.5%

Population age 60+ years: 8 million Population age 80+ years: 1 million Proportion of older persons: 17.8%

#### Africa

Total population: 1,373 million

Distribution: 17.4%

Population age 60+ years: 77 million Population age 80+ years: 6 million Proportion of older persons: 5.6%



Source: United Nations (2019)<sup>1</sup>

### Top 10

Countries in the World by Proportion of Older Persons

Country		% of the total population aged 60 years or older
1	Japan	34.6
2	Italy	30.3
3	Portugal	29.8
4	Finland	29.4
5	Greece	29.2
6	Germany	29.1
7	Croatia	28.7
8	Malta	28.6
9	Bulgaria	28.4
10	Lithuania	28.3

Among countries with the lowest proportion of the population under aged 60 years only two are outside sub-Saharan Africa: United Arab Emirates and Qatar.

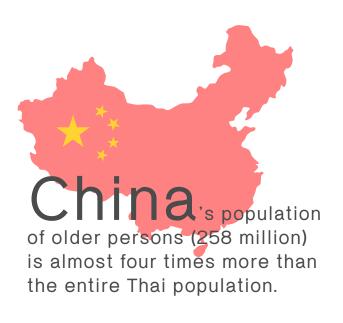


### Bottom 10

Countries of the World by Proportion of Older Persons

Country		% of the total population aged 60 years or older
1	Uganda	3.27
2	Zambia	3.47
3	United Arab Emirates	3.60
4	Angola	3.71
5	Equatorial Guinea	3.73
6	Mali	3.84
7	Qatar	3.93
8	Chad	3.93
9	Gambia	3.96
10	Burkina Faso	3.96

Source: United Nations (2019)1





### The United States

has more older persons (78 million) than the entire Thai population.

### Countries with the largest number of older persons

Country	Million persons
China	258.4
India	144.3
United States of America	77.5
Japan	43.6
Russia	33.4
Brazil	31.0
Indonesia	28.8
Germany	24.4
Italy	18.3
France	17.8
United Kingdom	16.9

Source: United Nations (2019)<sup>1</sup>

#### 1.1.3.1 General situation

From the end of 2019, when the COVID-19 pandemic began, until December 31, 2021, there have been 288 million confirmed cases of COVID-19 worldwide.

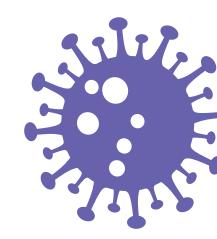
Europe recorded the most cases with 89 million, followed by Asia with 85 million, and North America at 65 million.<sup>2</sup>

The case fatality rate is 1.9% globally, and 1.5% in Asia. The highest Covid case-fatality rate was recorded in Yemen (19.6%). Case-fatality rates for other countries include China (4.5%), the USA (1.5%), India (1.4%), the UK (1.2%), Japan (1.1%), and Thailand (1.0%).<sup>2</sup>

The excess mortality rate during the COVID-19 pandemic provides a crude estimate of deaths attributable to COVID-19, both directly and indirectly. The increase over the average expected number of deaths as of 31 December 31 varies between countries. The highest level of excess mortality was found in Peru at 84%. Excess mortality in other countries includes Ecuador at 43%, Russia at 31%, the UK at 11%, Thailand at 6%, and Germany at 4%.<sup>2</sup>

The above data shows the situation in each region and country that has experienced a serious epidemic of COVID-19 in the past two years. Globally, there is no end in sight to the spread of this virus, despite the availability of highly effective vaccines. Many governments have implemented measures to reduce transmissions, such as closures of indoor entertainment establishments, curfews. border closures, mandates for mask-wearing, temperature checks, and social distancing. Some countries have ordered lockdowns in areas of large outbreaks, with mandatory quarantine for cases and contacts. Ever since the beginning of the pandemic, older persons have been among the most vulnerable groups to COVID-19 infection, hospitalization, and death. Thus, COVID-19 and the containment measures have had both direct and indirect impacts on societies around the world, and the effects of these are still being felt over two years after the first case was detected.





#### 1.1.3.2 Stress and anxiety:

### Effects of social distancing and travel limitations on older persons

While there are treatments and vaccines to protect against COVID-19, the virus continues to mutate into more infectious strains, and that is hampering infection control around the world. Plus, since younger people often do not have a serious illness from COVID-19 infection, there is widespread resistance to prevention measures; many people even refuse to have the safe and free COVID-19 vaccine. Now that countries are allowing entry of foreign visitors, and entertainment establishments are reopening, it is inevitable that there will be more spread of Covid in the months and years to come. Even though more recent strains of COVID-19 (e.g., Omicron variant) are less virulent than previous stains (e.g., Delta variant), older persons are still one of the most vulnerable groups of the population to illness and death from this virus.

In order to protect older persons from COVID-19 infection, prevention programs have strongly urged older persons to shelter in place and avoid contact with outsiders or even people in the household who have to travel outside the home for work or school on a daily basis and, thus, could transport the virus back into the household and infect the older members. These precautions are creating a "social quarantine" of older persons that have drastically reduced the amount of in-person human contact that they experience. If this form of isolation was only needed for a few days or weeks, that might be tolerable. However, this self-quarantine has been going on now for months

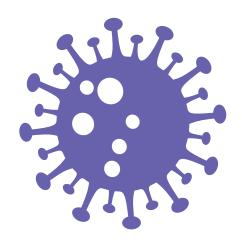
and/or more than a year, and this is imposing a severe strain on the mental health of older persons who cannot meet neighbors or peers, or even have physical contact with their relatives in the extended family. The stress and sadness from prolonged isolation are also manifest in physical ailments and other debilitating conditions that are indirectly attributable to COVID-19 and the containment measures.

Studies on the effects of social distancing in many countries around the world reveal its deleterious mental health effects such as anxiety, loneliness, and depression. Surveys in China, Spain, and Italy found an increase in rates of anxiety and depression among older persons during the COVID-19 pandemic, especially older women. In addition, having family members or acquaintances infected with COVID-19 or having family members who have to work outside the home also creates concern and fear for older persons (or their risk of exposure to the virus).

This sense of isolation, anxiety, and depression erodes the quality of sleep and disrupts the daily routine of older persons, especially physical activity which, in normal circumstances, would help keep the older person's mind and body fit and alert, and reduce the risk of accidental falls, disability, and hospitalization. However, in the absence of activity and social contact, a person's mental and physical health will deteriorate, even in older persons who were previously strong and healthy.

If social distancing and isolation need to be prolonged, mental health experts suggest increasing the level of communication with older persons through any means, including the use of Internet applications, video calls, regular phone calls, etc., to keep them feeling engaged, relevant, and not forgotten. Many of the social media platforms have group options (e.g., LINE) where a number of peers and friends can meet virtually on a regular basis to socialize. The older persons in the household need to be encouraged to maintain a regular routine, sleep and wake up at about the same times, keep to healthy eating habits, and exercise regularly, including engaging in activities to stimulate perception to slow down the deterioration of the nervous system.<sup>3</sup>

Caregivers of older persons play an important role in helping older persons to have good physical and mental well-being. Due to restrictions on access to the services or activities that older persons had regularly participated in before, caregivers may adopt other strategies to protect older persons, including limiting viewing or access to potentially-depressing news, and steering the older person's attention to good news and optimistic thinking. All the family members need to participate in this positive communication to help older persons maintain hope until there is a return to normalcy.<sup>3</sup>



### 1.1.3.3 The double burden on older persons during the COVID-19 crisis

As noted, the COVID-19 pandemic and containment measures have segregated older persons from their home community and society at large. What is more, older persons have had reduced access to information during the pandemic. The attempts to substitute for this isolation by creating virtual social events, online shopping, and home delivery does not make up for the casual random contacts that one has by going outside the home to the market or the local park to engage in simple social civilities with fellow humans. Thus, this isolation creates a "double burden" for older persons by virtue of unintentional neglect, which may worsen into a sense of alienation or abandonment.<sup>4</sup>

Older persons are one of the most vulnerable groups in society due to the natural deterioration in health, proneness to illnesses/disability of aging, and reduced learning ability and cognitive function. This later impediment makes it increasingly difficult for older persons to use digital technology and the Internet, especially given how rapidly the platforms, fashions, and technology are changing. Modern tools, like smartphones, have helped many people feel closer to each other during periods of self-quarantine or social distancing. However, this may not work so well for the elderly, especially those who live alone or who are in a remote care facility. Older persons in rural areas probably do not have a robust or reliable Internet signal and, thus, cannot take advantage of social media and digital communication, even if they have the skills to do so. Their various non-communicable

diseases (NCDs) or disabilities may further erode their ability to use modern technology in order to stay in touch with loved ones, friends, and society in general.

This "dual burden" does not only apply to older persons in countries with limited resources. Even in the United States, only one in five persons aged 65 years or older participated in online activities with friends and family members during the COVID-19 era. Digital technology is leaving older persons behind in a serious way, and this only exacerbates the social exclusion and isolation that COVID-19 has rudely imposed on them.

In the ongoing COVID-19 pandemic, the key to accessing virtual links with others is the Internet. A survey in the United States found only 27% of persons d 65 years or older use the Internet, and a survey of 17 European countries found that about 51% of persons aged 50 years or older use the Internet. Factors behind Internet usage include age, gender, education, income, health, and experience/familiarity with technology. Surveys in developed countries show that there are still many older persons who do not have access to or use the Internet.<sup>4</sup>

Many older persons also enjoy traditional practices such as face-to-face meetings and communicating by regular telephone. The use of technology among older persons who are healthy and able to perform daily activities on their own has greatly increased. As a result, they feel more independent and satisfied with their lives than those who are unable to use technology on their own. The digitally less-literate older persons will be left behind as

society relentlessly embraces modern technology. The ability to use digital communication is especially important for those who provide long-term care for older persons, and who may be older persons themselves.<sup>4</sup> A survey in Germany found that only 3% of persons aged 80 years or older (either at home or in a long-term care facility) used Internet-connected communication devices.<sup>7</sup>

In the COVID-19 era, when an older person becomes ill today, they can be overwhelmed by the dual burden of neglect by social distancing and inaccessibility to Internet communication. This threat has become particularly acute during the COVID-19 epidemic. Digital exclusion is directly related to social alienation, and this phenomenon has been amplified in the COVID-19 era.<sup>4</sup>

Reducing technological alienation can be achieved by making Internet access a fundamental right that everyone should enjoy, just as there is statefacilitated access to electricity and other basic utilities. Interventions include educating and training older persons according to their level of self-care potential or disability, manufacturing or developing digital technology at a lower cost, developing systems that are easy to use by adjusting the application interface, creating an automatic connection when users go online, and many other amenities to bridge the digital divide for older persons. Eldercare facilities need to facilitate digital access for residents by providing voice or video communication services. Staff can serve as liaisons in digital communication between older persons and their families, friends, and other essential contacts.



### International Day of Older Persons (IDOP)

The United Nations General Assembly passed a resolution on 14 December 1990 to

### recognize October 1 of each year

### as the "International Day of Older Persons"

in order to raise awareness around the world of the status, needs, opportunities, and challenges that societies face as their population ages. Of special importance is the recognition of older persons' contributions to society, consideration of older persons' human rights and value to society, as well as preventing acts of violence against older persons and combating ageism.<sup>8</sup>

#### The Motto of IDOP -- 2021

In 2021, the theme of IDOP is "Digital Equity for All Ages" to increase the participation of older persons in the digital revolution that is taking the world by storm.

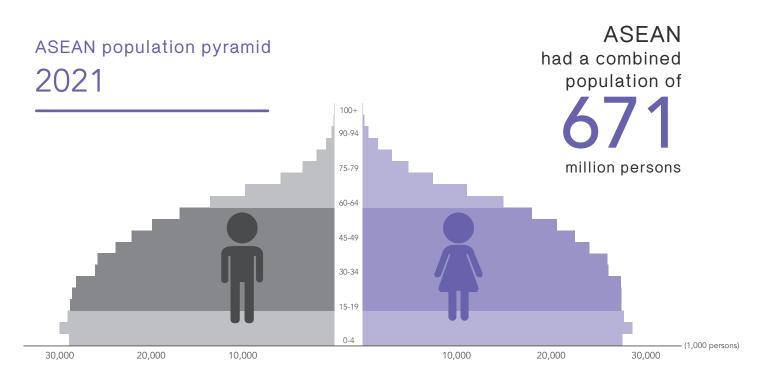


### **Digital Equity for All Ages**

to affirms the need for access and meaningful participation in the digital world by older persons.

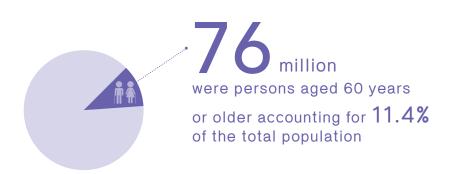


The Population of Older Persons in ASEAN



Sex ratio: 99.7 males per 100 females

### Number of older persons in ASEAN





The "old-old" (80 years or older)



Sex ratio of the old-old in ASEAN
58 men per 100 women

Source: United Nations (2019)<sup>1</sup>

# Population pyramids for ASEAN member countries as of 2021

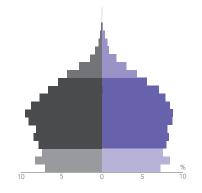
Brunei

total population

0.4

million persons

Age	million persons	%
0-14	0.1	21.9%
15-59	0.3	68.0%
60+	0.04	10.1%
80+	0.004	0.8%



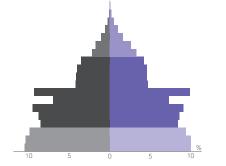
In ASEAN, there are only three countries that are not yet an "aged society," namely Laos, Cambodia, and the Philippines.

#### Cambodia

total population

16.9 million persons

Age	million persons	%
0-14	5.2	30.7%
15-59	10.4	61.5%
60+	1.3	7.8%
80+	0.1	0.6%

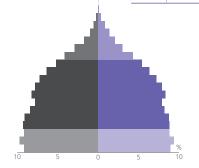


#### Indonesia

total population

276.4 million persons

Age	million persons	%
0-14	70.8	25.6%
15-59	176.8	64.0%
60+	28.8	10.4%
80+	2.6	0.9%

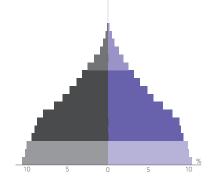


#### Laos

total population

7.4 million persons

Age	million persons	%
0-14	2.3	31.6%
15-59	4.6	61.4%
60+	0.5	7.0%
80+	0.04	0.6%

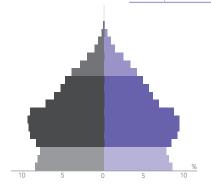


#### Malaysia

total population

32.8 million persons

Age	million persons	%
0-14	7.6	23.3%
15-59	21.5	65.4%
60+	3.7	11.3%
80+	0.4	1.2%

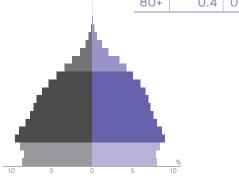


#### Myanmar

total population

**54.8** million persons

Age	million persons	%
0-14	13.8	25.1%
15-59	35.4	64.6%
60+	5.6	10.3%
80+	0.4	0.8%

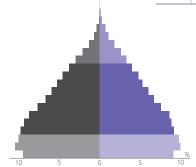


#### The Philippines

total population

111.1 million persons

Age	million persons	%
0-14	32.8	29.5%
15-59	68.4	61.6%
60+	9.9	8.9%
80+	1.0	0.9%

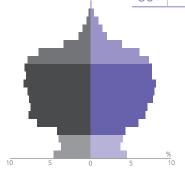


#### Singapore

total population

5.9 million persons

Age	million persons	%
0-14	0.7	12.4%
15-59	3.9	65.7%
60+	1.3	21.9%
80+	0.1	2.4%

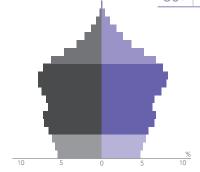


#### Thailand

total population

66.7 million persons<sup>9</sup>

Age	million persons	%
0-14	11.1	16.6%
15-59	43.1	64.6%
60+	12.5	18.8%
80+	1.4	2.1%

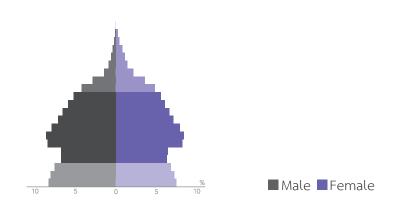


#### Vietnam

total population

98.2 million persons

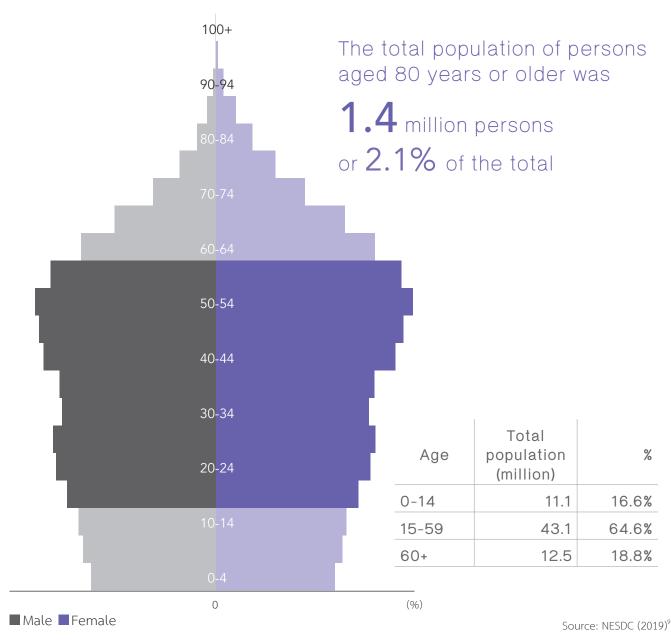
Age	million persons	%
0-14	22.8	23.1%
15-59	62.9	64.1%
60+	12.5	12.8%
80+	1.9	1.9%





## In 2021, Thailand

had a population of 66.7 million persons.



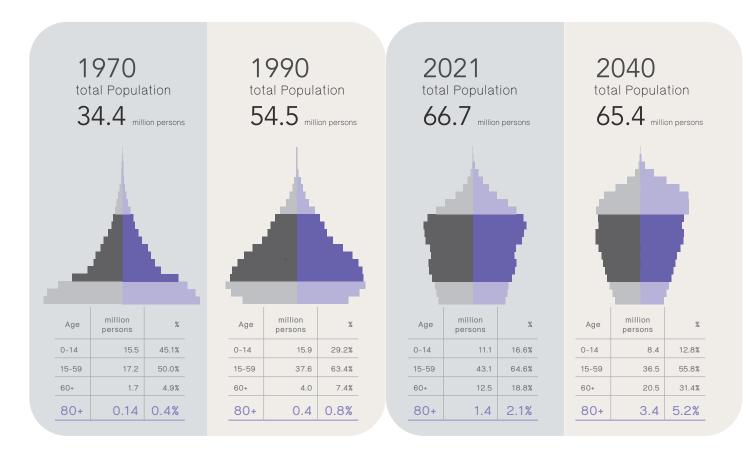
#### Sex ratio

93 males



100 females

In the next 20 years, the number of Thai older persons will increase from 12.5 million in 2021 to 20.5 million in 2040 accounting for 31.4% of the total population.



■ Male ■ Female Source: NESDC (2019)<sup>9</sup>

# An interesting, but alarming, feature about the ageing of the Thai population

The cohort of the old-old will increase much faster than the younger cohorts of older persons. A half-century ago, the number of Thais aged 80 years or older was less than 200,000 people (0.4% of the total). That number has increased to 1.4 million (2.1% of the total) as of 2021, and will more than double to 3.4 million (5.2% of the total) in the next 20 years.

# 1.3.1 The year 2021 is the first time in recorded history in which Thai deaths exceeded births

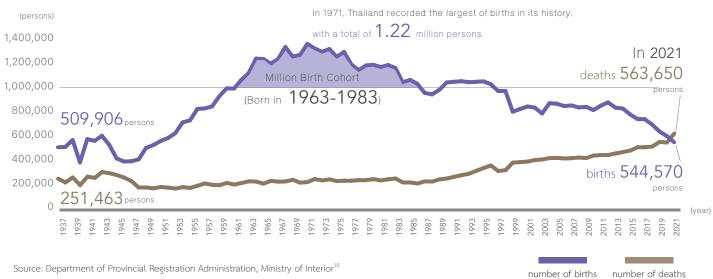
The Thai Ministry of Interior reports the number of registered births and deaths during January 1 to December 31 of every year. Up until 2021, the number of people born in Thailand each year had always exceeded the number of deaths. What is more, between 1963 and 1983, Thailand had more than one million births each year: Dubbed the "Million Birth Cohort." In 1971, Thailand recorded the largest of births in its history, with a total of 1.2 million persons. However, after 1984, the number of Thai births has declined each year and, in 2020, the number of births dropped to 600,000.



# This year, in 2021, the number of births declined further to only 544,570.

By contrast, during this same period, the number of deaths in Thailand has been increasing. However, up until 2021, the number of births had always exceeded the number of deaths, meaning that there was a net population gain. The number of Thai deaths began to increase noticeably starting in 2010, and Thai mortality that year reached 400,000. In 2019, Thai deaths totaled a half million and, in 2021, the number of deaths increased further to 563,650. This year was the first in recorded Thai history in which deaths exceeded births, equivalent to a negative population growth rate (i.e., a decline of -0.02%). This demographic milestone has occurred far more quickly than had been projected, in part, probably due to the excess mortality from the COVID-19 pandemic.

#### Reported Thai births and deaths: 1937-2021



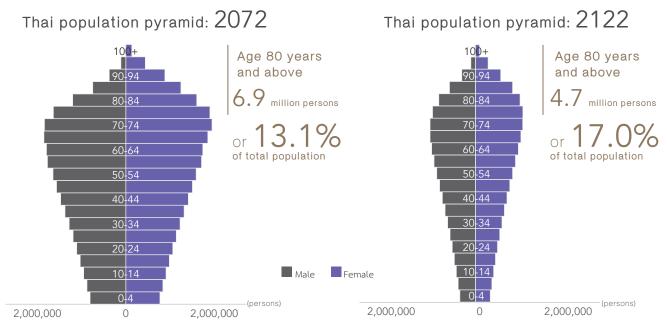
#### 1.3.2

#### Thai older persons: 50 and 100 years in the future

In the next 20 years, or in 2040, the overall Thai population is projected to decrease from 66.7 million persons to 65.4 million persons. The proportion of young people (0-14 years) will decrease from 16.9% to 12.8% of the total Thai population. The working-age Thais (age 15-59 years) will decrease from 65.0% to 55.8% of the population. By contrast, the proportion of the population who is aged 60 years or older will increase from 18.8% in 2021 to 31.4% in 2040. That increase represents a near doubling, from 12.0 million persons to 20.5. million persons over that time period.

In the next 50 years, or by the year 2072, if Thai fertility continues to decline according to the current trends (i.e., until Thai total fertility declines to 1.2 or below), the Thai population will decrease to 52 million persons. In that year, the proportion of young people (0-14 years) will decrease from 16.6%. to 10.7% of the total population; the working-age Thais (15-59 years) will decrease from 64.6% to 47.9%; and the proportion of the population that is older persons will increase from 18.8% in 2021 to 41.9% in 2072.<sup>11</sup>

One hundred years from now, or in 2122, if current trends hold, the Thai population will have declined to only 28 million persons. In that year, the proportion of young people (0-14 years) will decrease to 8.4% of the total population; the working-age Thais (15-59 years) will fall to 44.8%; and the proportion of the population that is aged 60 years or older will increase to 46.8%, or nearly one out of every two Thais will be an "older person."





#### References

- 1 United Nations. (2019). World Population Prospect: The 2019 Revision. Retrieved from: https://population.un.org/wpp/Download/Standard/Population/
- 2 Ritchie, H., et al. (2020). Coronavirus Pandemic (COVID-19). OurWorldInData.org.
- 3 Sepúlveda-Loyola, W., et al. (2020). Impact of Social Isolation Due to COVID-19 on Health in Older People: Mental and Physical Effects and Recommendations. *The Journal of Nutrition, Health and Aging, 24*(9): p. 938-947.
- 4 Seifert, A., S.R. Cotten, and B. Xie. (2021). A Double Burden of Exclusion? Digital and Social Exclusion of Older Adults in Times of COVID-19. *The Journal of Gerontology: Series B, 76*(3): p. e99-e103.
- 5 Vogels, E.A.. (2020). From virtual parties to ordering food, how Americans are using the internet during COVID-19. Retrieved May, 10: p. 2020.
- 6 Xie, B., et al. (2020). When going digital becomes a necessity: Ensuring older adults' needs for information, services, and social inclusion during COVID-19. Journal of Aging & Social Policy, 32(4-5): p. 460-470.
- 7 Schlomann, A., et al. (2020). Assistive technology and mobile ICT usage among oldest-old cohorts: comparison of the oldest-old in private homes and in long-term care facilities. *Research on Aging*, 42(5-6): p. 163-173.
- 8 United Nations. (2021). *International Day of Older Persons: United Nations*; [Available from: https://www.un.org/en/observances/older-persons-day
- 9 Office of the National Economic and Social Development Council. (2019). *Report of the Population projections for Thailand 2010-2040 (Revised Edition)*. Bangkok: Office of the National Economic and Social Development Council.
- 10 Department of Provincial Registration Administration, Ministry of Interior. (2020). *Registration statistics system.* https://stat.bora.dopa.go.th/stat/statnew/statyear/#/
- 11 Sutthida Chuanwan and Pramote Prasartkul. (2020). The optimum size of population for Thailand. *Journal of Demography, 36*(1): p. 1-16.
- 12 Pramote Prasartkul, Sutthida Chuanwan and Phimonphan Isaraphakdi. (2018). *Research report titled "Optimum Population for Thailand.* Nakhon Pathom: Institute for Population and Social Research, Mahidol University.



# Thai Older Persons and COVID-19

(continued from 2020)

The COVID-19 pandemic in Thailand, which started in early 2020, has persisted through 2021. Thus, the impact of the pandemic on Thai older persons continues to be a key theme of this 2021 edition of the "Situation of the Thai Older Persons."

This chapter focused specifically on indicators and developments in the context of older persons and COVID-19.

In that sense, this is a sequel to the special theme of the 2020 report on "The Situation of Older Persons in Thailand."

### 2.1.1 Older persons who have been infected with COVID-19

The data from the Department of Disease Control (DDC) of the Ministry of Public Health (MOPH) for the period from January 1 - December 31, 2021, indicate that there was a total of 1,667,792 cases of COVID-19, of which 182,950 were older persons aged 60 years or older, or 11.0% of the total population infected with COVID-19.

Among the group of older persons infected with COVID-19 in 2021, 78,278 were men (42.8%) and 104,672 were women (57.2%).

Fully 110,991 COVID-19 cases were among those aged 60-69 years (6.7% of the total); 48,577 were aged 70-79 years (2.9%); and 23,382 were aged 80 years or older (1.4%).

11% of the total
Thai caseloads of COVID-19
infections in 2021 was
among older persons;

older persons accounted for nearly 69.8%

of all COVID-19 deaths in the year

Table 2.1: Number of Persons Infected with COVID-19 and Dying from COVID-19 by Age: 2021

		Infec	tions		Deaths				
Age Group (years)	male	female	total	%	male	fe- male	total	%	% (of total infections)
Total	786,863	880,929	1,667,792	100.0	11,241	9,676	20,917	100.0	100.0
0-14	116,143	108,744	224,887	13.5	21	14	35	0.2	0.02
15-59	592,442	667,513	1,259,955	75.5	3,558	2,727	6,285	30.0	0.5
60+	78,278	104,672	182,950	11.0	7,662	6,935	14,597	69.8	8.0
60-69	48,318	62,673	110,991	6.7	2,716	2,080	4,796	22.9	4.3
70-79	20,955	27,622	48,577	2.9	2,617	2,135	4,752	22.7	9.8
80+	9,005	14,377	23,382	1.4	2,329	2,720	5,049	24.2	21.6

Source: Registry of COVID-19 cases and deaths, DDC, MOPH (Jan. 1 – Dec. 31, 2021)

#### 2.1.2 Deaths among older persons attributable to COVID-19

The DDC of the MOPH reported that, in 2021, a total of 20,917 people died from COVID-19, of whom 14,597 were older persons (aged 60 years or older), or 69.8% of the total deaths (including all age groups).

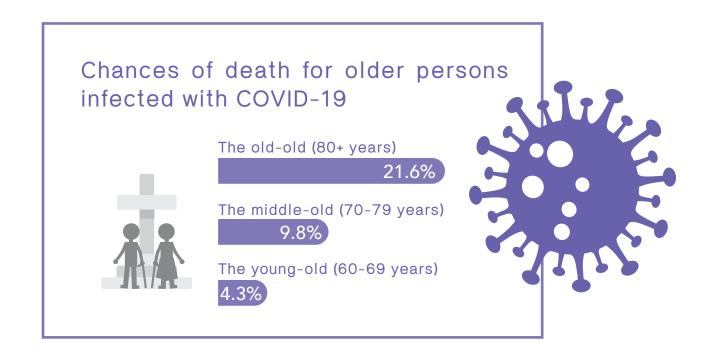
The older persons who died from COVID-19 comprise 7,662 men (52.5%) and 6,935 women (47.5%).

By age group, COVID-19 deaths in 2021 totaled 4,796 people aged 60-69 years (22.9%), 4,752 people aged 70-79 years (22.7%), and 5,049 people aged 80 years or older (24.2%).

Even though Thai older persons accounted for only 11.0% of the total caseload, they account for nearly 70% of all COVID-19 deaths.

The 2021 COVID-19 mortality rate for the population aged 60 years or older was 8.0%, and that is many times higher than the AIDS mortality rate of the population aged 0-59 (0.5%).

Moreover, the "old-old" (80+ years) had the greatest risk of death from COVID-19 (21.6%) compared to those aged 70-79 years, or aged 60-69 years, whose death rates were 9.8% and 4.3%, respectively.



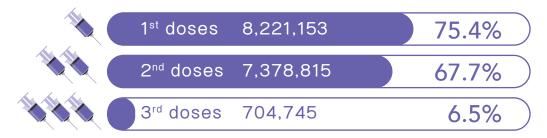


#### 2.1.3 Older persons and the COVID-19 vaccine

# Coverage of the COVID-19 vaccines among Thai older persons

Of the total registered 10,906,142 population of persons aged 60 years or older nationwide (as of March 2021), Thai older persons have received 16,304,713 doses of the COVID-19 vaccine (including  $1^{st}$ ,  $2^{nd}$ , and  $3^{rd}$  doses) in 2021.

The following shows the coverage of vaccination by dose:



Source: Data for the period February 28 - December 31, 2021, DDC MOPH

#### Top 5 Health Zones:

Coverage of 2 doses of the COVID-19 vaccine for Thai older persons

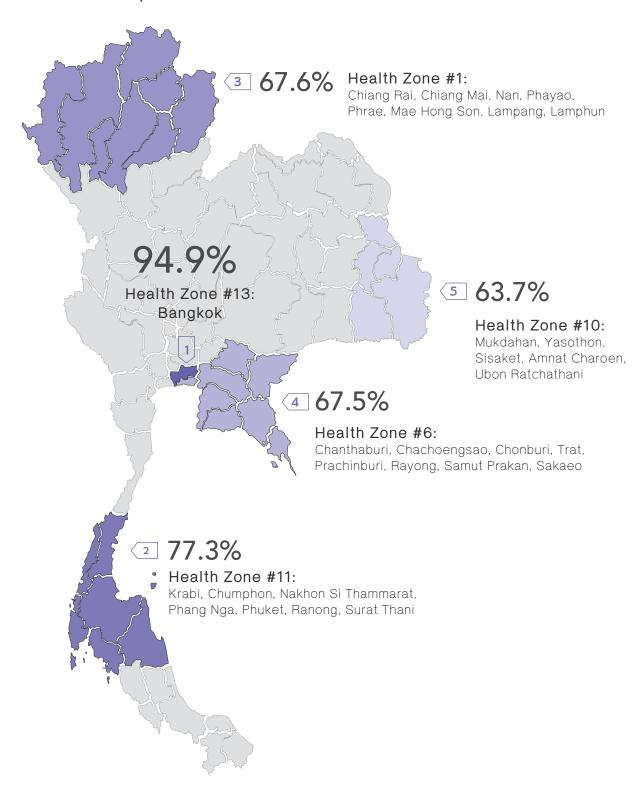


Table 2.2: Coverage of COVID-19 vaccine for Thai older persons by health zone and dose

	Number of	Cov	verage by dose	(%)
Health Zone # and Provinces	older persons**	1	2	3
1. Chiang Rai, Chiang Mai, Nan, Phayao, Phrae, Mae Hong Son, Lampang, Lamphun	1,127,037	78.9	67.6	6.1
2. Tak, Phitsanulok, Phetchabun, Sukhothai, Uttaradit	614,132	71.7	61.6	7.0
3. Kamphaeng Phet, Chainat, Nakhon Sawan, Phichit, Uthai Thani	568,374	66.0	62.2	4.3
4. Nakhon Nayok, Nonthaburi, Pathum Thani, Phra Nakhon Si Ayutthaya, Lop Buri, Saraburi, Sing Buri, Ang Thong	930,760	64.9	61.9	7.7
5. Kanchanaburi, Nakhon Pathom, Prachuap Khiri Khan, Phetchaburi, Ratchaburi, Samut Songkhram, Samut Sakhon, Suphan Buri	908,258	63.0	60.7	5.4
6. Chanthaburi, Chachoengsao, Chonburi, Trat, Prachinburi, Rayong, Samut Prakan, Sa Kaeo	907,053	72.1	67.5	6.6
7. Kalasin, Khon Kaen, Maha Sarakham, Roi Et	839,335	73.1	62.6	3.7
8. Nakhon Phanom, Bueng Kan, Loei, Sakon Nakhon, Nong Khai, Nong Bua Lamphu, Udon Thani	813,473	73.6	60.3	3.7
9. Chaiyaphum, Nakhon Ratchasima, Buriram, Surin	1,107,263	72.5	63.5	6.4
10. Mukdahan, Yasothon, Sisaket, Amnat Charoen, Ubon Ratchathani	695,178	74.6	63.7	4.3
11. Krabi, Chumphon, Nakhon Si Thammarat, Phang Nga, Phuket, Ranong, Surat Thani	671,674	82.9	77.3	9.5
12. Trang, Narathiwat, Pattani, Phatthalung, Yala, Songkhla, Satun	681,777	69.9	63.3	5.5
13. Bangkok	1,041,828	106.9	94.9	9.6
Total	10,906,142	75.4	67.7	6.5

Source: MOPH Immunization Center database: Feb. 28 - Dec. 31, 2021

Remarks: \*Registered population of the Office of Civil Registration, Department of Provincial Administration, March 2021

Older persons who experienced adverse reactions to the COVID-19 vaccine are entitled to compensation according to the principle of Article 41 of the National Health Security Act of 2002

Fully 60.7% of Thai people of all age groups said they were ready to receive he COVID-19 vaccine, however, only 53.8% of older persons said they were ready.<sup>1</sup>

52.8%

of Thai older persons said that the state financial compensation affected their decision to vaccinate

There were 4,088
Thai older persons with adverse reactions to the vaccine and who filed for initial financial assistance

(out of 13,836 applicants from all age groups).

Top 3 reasons for vaccine hesitancy among Thai older persons

16.3%

Unsure of safety

12.1%

Fear side effects

11.8%

Fear worsening one's NCD

Source: NSO (2021)

Therefore, to build confidence for people to receive the COVID-19 vaccine, the government introduced a policy to pay an incentive to persons who are vulnerable to adverse side effects from the vaccine, effective from April 5, 2021 onwards. This incentive is in accordance with the principle of preliminary compensation for damages from receiving health care services without the need for proof (i.e., No-fault Compensation) according to Article 41 of the National Health Security Act of 2002.

People adversely affected by the COVID-19 vaccination can request preliminary assistance at any of three locations: The vaccine service unit, the provincial health office, or any one of the 13 branches of the NHSO.

A subcommittee at the zonal level branch office will determine whether to approve payment of compensation, and how much to pay. In the event that the applicant disagrees with the decision of the subcommittee, that person has the right to appeal to the Secretary-General of the NHSO within 30 days.

Older persons who met the criteria for requesting assistance: 3,373 cases

(from the total number of 11,512 people who qualify for financial assistance in all age groups)

# Did you know that....

People adversely affected by the COVID-19 vaccine can file a claim for compensation

### up to 2 years

after having the vaccine or the onset of adverse side effects.

In 2021, the NHSO paid compensation to those who suffered from adverse reactions to the COVID-19 vaccine (all age groups)

amounting to

1,224,613,500 baht

More than half of the assistance (51.2%) was paid to older persons who had an adverse reaction to the COVID-19 vaccine and filed a claim

amounting to 626,764,500 baht

Source: Information system for monitoring the COVID-19 situation, National Health Security Office (2022)

# 2.1.4 Access to public health services for older persons

The health problems which disproportionately affect older persons include the following:

#### Physical health effects

This includes difficulty accessing health services in general for older persons.<sup>1</sup> That finding is consistent with the results of a study which found that older persons tend to have reduced access to (non-urgent) health services, such as screening for chronic NCDs, cataract surgery, knee replacement surgery, symptom monitoring, and counseling for patients/relatives on palliative care and treatment for influenza. During the period of COVID-19 spread, Thai older persons had increased or the same access to treatment and emergency services.

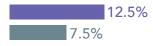
During the COVID-19 pandemic, nearly all hospitals in Thailand focused on reducing, refraining, and postponing non-essential procedures and non-urgent surgery. However, many hospitals have adjusted their mode of service delivery by adopting digital technology such as telehealth/telemedicine to complement or replace in-person treatment in order to reduce hospital visits for patients with mild and/or stable health conditions, while maintaining the quality of service, including diagnosis, treatment, and monitoring of symptoms. The long-distance service has improved access to care for older persons during the COVID-19 situation.

## Impact on activities in daily living of older persons

Chronic health problems (not caused by COVID-19)



Affected mentally/emotionally (e.g. stress, anxiety)



Problems with access to medical services when sick (e.g. having to postpone a doctor's appointment, the hospital is closed)



Mean of effects identified by populations of all age groups

Source: Thailand Development Research Institute<sup>2</sup>





Adverse impacts of the COVID-19 pandemic and containment measures

Stress and anxiety 90.0%

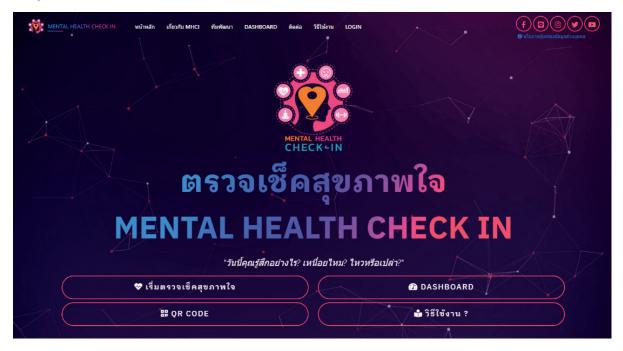
Decreased income and increased cost burden 59.3%

Fewer gatherings or activities outside home 47.9%



Source: Survey Poll, Ministry of Social Development and Human Security<sup>3</sup>

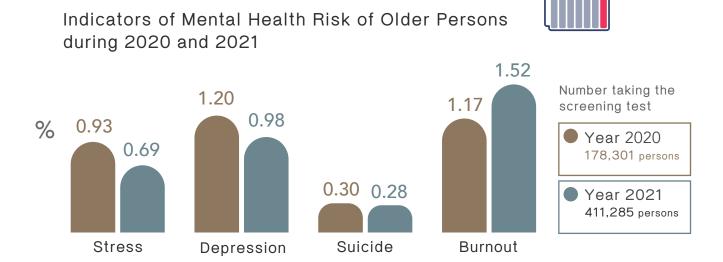
#### Impact on mental health



Website of the Mental Health Check-in, Department of Mental Health

The Department of Mental Health, MOPH, has developed a tool for self-assessment of primary mental health status during the COVID-19 situation called the "Mental Health Check-in" both in the form of a website and an interactive application, with a focus on four mental health risks: 1) Stress, 2) Depression, 3) Suicide, and 4) Burnout.

Data from the proactive screening database between 2020 and 2021 for older persons, it was found that high stress, risk of clinical depression, and suicidal ideation tended to decrease, while symptoms of burnout increased.<sup>4</sup>



Source: Results from the proactive application of the Mental Health Check-In diagnostic tool, Department of Mental Health, MOPH (2022)<sup>4</sup>

#### 2.2

# Access to Digital Technology for Thai Older Persons During COVID-19

#### 2.2.1 Access to government assistance programs by older persons

Throughout 2021, the government introduced measures and various programs to reduce the burden on the cost of living and recover the economy from the impact of COVID-19. These measures include the following major projects, with older persons as one of the beneficiary populations:

- 1. Project to increase purchasing power for state welfare card holders, phase 3 (July-December 2021)
- 2. Project to increase purchasing power for those who need special assistance
- 3. Half-and-Half, Phase 3
- 4. The More You Use, the More You Gain
- 5. We Win

99.3%

of Thai older persons know about the government's assistance and remedy measures from the COVID-19 situation 1 in 3 older persons (32.2%)

faced problems in registering via the Internet to exercise their right to access government assistance; that was more than any other age group, among whom only 26.7% faced such problems

Source: NSO (2021)<sup>5</sup>

## Top 5 resons

why older persons had difficulty registering for government assistance on the Internet

- 15.0% Lack of skills, cannot do it by oneself
- 2 8.5%
  The steps are complicated and too many
- 3.5% Lack of equipment
- 4 2.5%
  Have equipment which is old or inefficient
- 5 2.1%

  Lack of adequate Internet signal

Source: NSO (2021)<sup>6</sup>

# 2.2.2 Participation in and satisfaction with the government assistance measures by older persons

Participation by older persons

#### We Win

62.1%

of people of all age groups said they participated in the project





Only 70.3% of older persons said they participated in the project

#### Top 3

reasons for not participating in the project

Did not meet the project conditions, such as being an insured person under Article 33, being a government official, being a pensioner, having deposits over 500,000 baht

15.1%

Late registration



Not worried about expenses

2.9%

#### Half-and-Half

36.6%

of people of all age groups said they participated in the project







Only 17.0% of older persons said they participated in the project

Did not meet the project conditions, such as having a state welfare card, using the rights from the "Shop Dee Mee Keun" Project; not having the Thai welfare card

35.2%

Late registration/no vacancies

19.7%

Don't understand the project conditions

18.9%

We Travel Together 10.6%

of people of all age groups said they participated in the project



เราเที่ยวด้วยกัน



Only 3.2% of older persons said they participated in the project

Not interested in participating in the project

34.3%

Difficult to use

17.3%

Digital connection didn't work

15.7%

Source: NSO (2021)<sup>6</sup>

#### Satisfaction

by older persons with the project

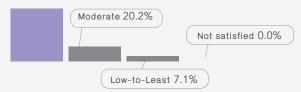
#### High-to-Very High 87.3%



#### High-to-Very High 88.2%



#### High-to-Very High 72.7%



## Top 5

government assistance projects which people felt were helpful

State welfare card

77.5%

We Win

71.5%

Reduction of electricity/water bills

65.6%

Half-and-Half

48.6%

Article 33 Project: We Love Each Other

30.7%

Source: NSO (2021)°

# Adjusting and Access to Digital Applications for Thai Older Persons in 2021

#### 2.3.1 Access to government assistance programs by older persons

# Top 5 Reasons why older persons did not use the Internet 1 No knowledge at all/can't use it 42.0% Difficult/complicated/ incomprehensible 17.7% 3 Do not want to use 8.3% 4 No equipment/device 7.6% 5 Incapable of self-learning 7.5%

In 2021 More than half (54.6%)

of Thai older persons said they did not use the Internet.

Source: NSO (2021)7

#### 2.3.2 Digital applications for government programs during COVID-19



**Pao Tang:** Supports various measures to help and recover from effects of COVID-19, such as the Half-and-Half, We Travel

Together, The More You Use, The More You Gain, and Article 33: We Love Each Other. There is also an Internet application to reserve an appointment for COVID-19 vaccination under the "Thai Ruam Jai" project.



Thai Chana: This app can be used to scan check-in/check-out at public places, shops, and facilities. The data can be used

to evaluate activities and places that people will visit, and reduce the chance of traveling to places that may be crowded with many people, thereby reducing the risk of COVID-19.



Mor Chana: This provides data on COVID-19 outbreaks, helps assess the user's risk, and helps reduce the risk for healthcare

professionals who may encounter infected people who come for services.

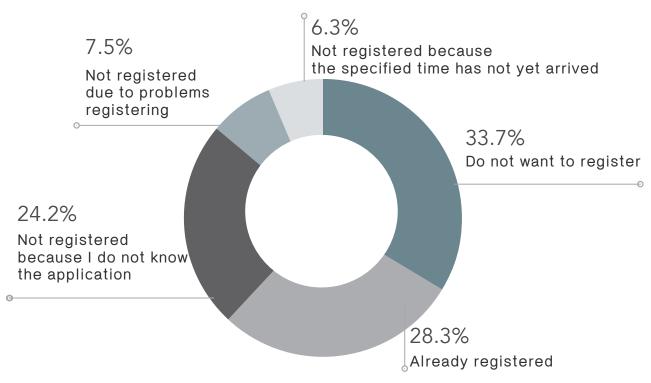


Mor Phrom: This app facilitates registration, booking, an receiving the vaccination for users throughout the country. People

can choose the day, time and hospital where they want to get vaccinated.

# Status of registration of older persons to get the COVID-19 vaccine, using the

#### Mor Phrom application

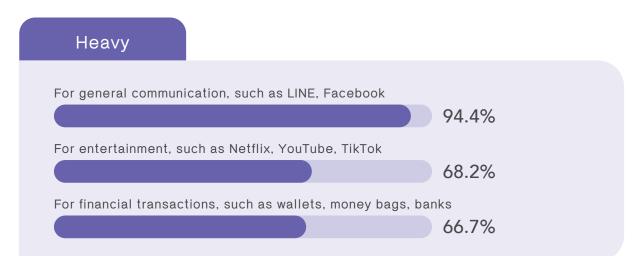


Source: NSO (2021)<sup>7</sup>

# Top 3 reasons for not registering with Mor Phrom application 1 8.0% Cumbersome/many steps 2 7.6% Not yet ready to be vaccinated

3 5.6%
Already vaccinated or registered through other channels

## 2.3.3 Use of various Internet or smartphone applications by Thai older persons



#### Moderate

For health, such as Mor Phrom, Non Phrom, BetterMe

33.2%

For buying or selling products via online, such as Shopee, Lazada

33.0%

#### Light

For receiving or ordering food online such as Grab Food, Lineman), Food Panda, Robinhood

14.0%

For travel such as Grab Taxi/Grab Car

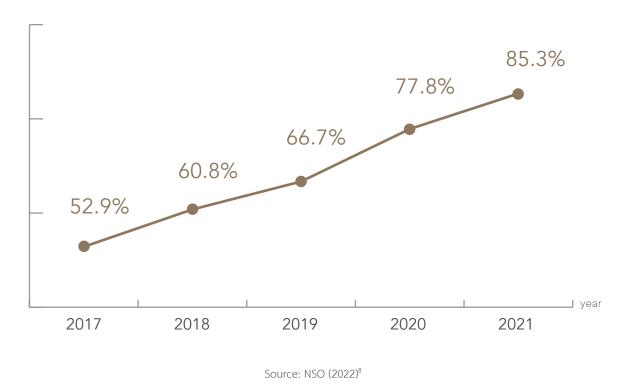
2.8%

Source: NSO (2021)<sup>6</sup>

#### Technological advances, COVID-19, and the digital divide

Thai people's access to digital technology has improved greatly in the past decade, especially during COVID-19, as indicated by the increased volume of Internet use (see Figure below). At the same time, Thailand is still a society with a "Digital Divide." In 2021, approximately 15% of the Thai population still does not have access to internet services, 8 especially older persons who are least likely to be digitally connected.

#### Percent of the Thai Population with Access to the Internet: 2017-2021



The COVID-19 crisis exposed the widening inequality of the population, as measured by access to and use of digital technology. That is because Internet and smartphone applications have been one of the key tools which the government has used to fight the spread of the virus and provide remediation for persons who have been financially impacted by the COVID-19 containment measures. In addition, access and facility to the Internet have become imperative for those who have to take classes online or work from home. The ability to use digital technology is one of the major ways

to stay in touch with neighbors and one's social network, especially when group gatherings are not allowed, and people are strongly encouraged to practice social distancing and sheltering alone in place. However, as COVID-19 has shown, many people are being left behind in the digital revolution in Thai society, and it is inevitable that most of these people are members of the older generation.

In order to reduce the digital divide and bring more older people into the Internet age, the thematic campaign of "Digital Equity for All Ages" has been launched under the context of "International Day of Older Persons: IDOP 2021".

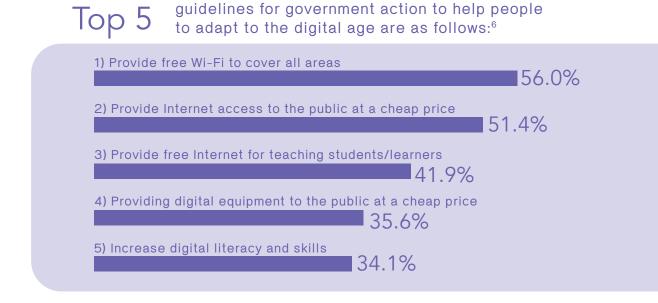
The United Nations has called for member states to campaign on IDOP under the theme of "Digital Equity for All Ages." The campaign calls on governments around the world to be aware of the risks and vulnerabilities that older persons face during the COVID-19 situation. For example, in Thailand, many older persons still face problems of inaccessibility to welfare and social protections due to limitations in the use of digital technology and the Internet, since many of these programs strongly urge eligible persons to register online. Anyone without access to a digital device (or the know-how to navigate a website or computer application) will not be able to register and, most likely, will give up trying and be deprived of state welfare support.

Clearly, accessing government assistance measures should not require complicated registration procedures, and should take into account that most older and socially-disadvantaged persons are not that skilled in using digital devices and platforms to register, or even have such a device and a stable Internet connection.

Over the past two years of the COVID-19 epidemic in Thailand, the government has introduced a number of applications and digital platforms to help the population to begin preparing for the transition into an "aged society." This effort is a collaboration between 12 agencies under six ministries, with the aim to facilitate older persons to have access to various services and assistance measures from the government. Perhaps with the intention to increase coverage and efficiency of data processing, the government has made many of these programs accessible through digital applications, requiring the use of a digital device and an Internet connection. This poses a big hurdle to most older persons who are not as digitally literate as the younger generation, and they are still the minority of regular Internet and smartphone users. In addition, the different collaborating state agencies often have separate types of digital applications to access welfare and assistance, and this makes the program all that more incomprehensible and intimidating for older persons. The optimal solution would be for the government to create a single application which is used across ministries and agencies so that the user need only log in once to access the different programs.

#### Design of Policy to Promote Digital Equality

In designing policies to promote digital fairness, an important issue that the government should consider is subsidized provision of Internet services and equipment to connect to the Internet for people of all ages, but especially older persons, so that access to digital information and services is convenient, affordable, and reliable.



While Thai older persons are the least digitally-connected segment of the population compared to other age groups, there is a tremendous opportunity to expand the digital infrastructure to cover all areas and help older persons to transition into the digital age through various policies. Especially given the rapidly-aging population, it is imperative that the government begins this process now so that older persons will learn how to access and make the best use of services that will increasingly be offered online, and take advantage of maintaining their family and social connections to preservice their mental health, and be able to live independently for as long as possible.

In addition, policies to promote digital equality should urgently call for narrowing the digital skills gap of older persons, and determine the appropriate safety measures so that novice older users of social media and smartphones are not exploited or harmed. Older persons need to feel comfortable in linking up to the Internet, and must not fear the Internet or social media.

Nothing is going to stop the international digital transformation that is taking place every day, especially in Thailand which is quick to adopt and adapt to global trends and innovations. COVID-19 has actually accelerated this race into a digital society, and it is imperative that the older generation not be left behind. Thus, the present is an opportune time to begin equipping Thai older persons to be skilled and confident users of digital devices, smartphones, the Internet, and social media in ways that will enrich their lives and strengthen their role in society and economy.

# Policy Recommendations for Promoting Digital Equity

The Thai National Statistical Office (NSO) conducted a public opinion survey on the COVID-19 pandemic situation ("Digital Adaptation and Accessibility").6 In addition, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) prepared a handbook entitled "Using Information and Communication Technology to Address the Healthcare Needs of Older Persons in Managing Chronic Disease: A Guidebook and Good Practices from Asia and the Pacific." Also, there are concrete proposals from research studies commissioned by the TGRI on promoting digital equality in Thailand.9 Accordingly, this 2021 Report on the Situation of Thai Older Persons synthesized the core findings from these and other sources of wisdom on digital technology policy to inform advocacy efforts to achieve digital fairness and improve the quality of life of Thai older persons. Those findings are summarized in the following recommendations:

#### Recommendations for content

#### Area #1: Digital Technology Fundamentals for Ageing Society

- (1) Invest and develop the Internet service infrastructure to cover all areas;
- (2) Provide subsidies to support expenses for Internet access for older persons;
- (3) Increase skills and literacy in the use of digital technology and online media for older persons;
- (4) Protect the rights and safety of using digital technology and online media for older persons; and
- (5) Promote the design and manufacture of age-friendly devices, innovations, platforms, and applications, including the creation of an integrated data link between agencies and ministries so that there are "one-stop" platforms for related services that older persons need access to.

### Area #2: Improving the quality of life and stability of the older persons with technology

- (1) Develop a system for remote health care for older persons (i.e., telehealth/ telemedicine) to increase access, efficiency, reduce costs, shorten the time, and reduce congestion in receiving essential healthcare services for older persons;
- (2) Establish an online enterprise incubator to support career building and increase income by doing business or working as a freelancer through online channels for older persons; and
- (3) Create an online store platform that is a marketing channel for products and services produced/offered by older persons.

#### Recommendations for mechanisms

- (1) Establish a coordinating committee that unites multiple responsible parties, including older persons, as part of the decision-making mechanism, nationally, regionally, and locally;
- (2) Develop an integrated policy framework covering populations of all ages, taking into account the policy context and content of past guidelines or projects;
- (3) Establish a clear legal and regulatory framework for digital technology development, including enforcement of laws to deter and punish criminal perpetrators;
- (4) Provide sufficient and sustainable funding sources for the implementation of policies and projects by supporting the participation of various related sectors;
- (5) Develop a human resources system in digital technology to be sufficient and appropriate for the needs of the rapidly increasing population of Thai older persons;
- (6) Support research to develop digital technology for people of all ages, but especially for older persons; and
- (7) Establish a clear monitoring and evaluation mechanism and continual action to improve implementation indefinitely.



#### References

- 1 Pattara Leelawarong, Peerawat Jinathongthai, Sutharn Chantawong, Yuthana Wongsalap, Kirati Kengkla, Araya Yanphiboon,...Nithijan Kitti, Ratkul Araya. (2019). *Impact of coronavirus disease 2019 (COVID-19) pandemic on access to healthcare services of elderly in Thailand.* Bangkok: HITAP.
- 2 Thailand Development Research Institute. (2021). *The Study of the Social and Economic Impacts of the COVID-19 Pandemic: Response Mechanisms and Aid Measures.* Bangkok: Thailand Development Research Institute.
- 3 Ministry of Social Development and Human Security. (2021). "60+ through the COVID-19 crisis to the next path (Next Normal). Retrieved from: http://tpso4.m-society.go.th/index.php/th/2017-04-23-09-05-18/poll/1056-poll-60-covid-19-next-normal
- 4 Department of Mental Health, Ministry of Public Health. (2022). *Information on mental health assessment of Thai people: Mental Health Check-In.* Retrieved from: https://checkin.dmh.go.th/dashboard/index.php.
- 5 National Statistical Office. (2022). A survey of people's opinions on government assistance and remedy measures from the COVID-19 situation, 2021. Retrieved from: http://www.nso.go.th/sites/2014/DocLib12/2564/080664\_13. pdf.
- 6 National Statistical Office. (2021). Public Opinion Survey on the Situation of the Pandemic of COVID-19 (Adaptation and Digital Accessibility), 2021. Retrieved from: http://www.nso.go.th/sites/2014/DocLib12/2564/report covid digital 64.pdf
- 7 National Statistical Office. (2021). *Public Opinion Survey on the Situation of the COVID-19 (Vaccination)*, 2021. Retrieved from: http://www.nso.go.th/sites/2014/DocLib12/2564 /report Vaccine.pdf.
- 8 National Statistical Office. (2022). The 2021 Household Survey on the Use of Information and Communication Technology (Quarter 4). Bangkok: National Statistical Office.
- 9 Phnom Kleechaya. (2021). Digital Technology Utilization of Elderly and Framework for Promoting Thai Active and Productive Aging. *Journal of Communication Arts, 39*(2), 56–78.



# Situation of Implementation of Activities for Older Persons in Thailand

Each year, Thailand carries out work on older persons that covers a variety of dimensions. This work is done by various ministries, bureaus, departments, and agencies.

This 2021 Report on the Situation of the Thai Older Persons includes details on the activities of agencies and entities which have kindly provided the relevant information.

The details establish the fact that the various agencies of the state have been implementing activities in support of older persons across various dimensions on a continuous basis.

#### 3.1

#### Measures of Assistance from Government Agencies to Assist Older Persons and Supplemental Measures to Lessen the Impact of COVID-19

Government agencies are working to promote the quality of life of older persons through various measures. They have added supplemental support to soften the impact of the COVID-19 pandemic and containment measures.

## Supplemental measures in response to hardships caused by COVID-19

#### 3.1.1 Economy and finance

There is a state subsidy for covering the cost of essential consumer goods for daily life. This includes financial assistance for emergency expenses and postponement of debt repayment. In addition, development activities for older persons were continued during periods of COVID-related restrictions by shifting to online training. The following are some examples of the economic assistance to people affected by COVID-19:

**Fiscal Policy Office Ministry of Finance:** The following four projects have been implemented continuously, starting in 2020:

- (1) The project to increase the purchasing power for State Welfare cardholders (Phase 3). The project has helped more than 13 million State Welfare cardholders by issuing credits to exchange for products at "Blue Flag" outlets. The purchase limit was increased by an additional 300 baht per person per month for a period of two months.
- (2) The project to increase purchasing power for those who need special assistance. This project reached more than two million people by providing credit to exchange for products at the Blue Flag shops and outlets, and complimentary membership in the "Half-and-Half" Project.
- (3) "Half-and-Half" Project, Phase 3: This project reduces the cost of products and services, and has reached 28 million people during the COVID-19 era.
- (4) The "Gain More" Project: This project provides e-vouchers to shoppers that can be used for purchases, with a limit of one million beneficiaries.

Social Development Bureau, Bangkok Metropolitan Administration (BMA): This has provided two million baht financial assistance to 1,236 older persons.

The Older Persons' Fund: This provides assistance to the debtors enrolled in the Older Persons' Fund who have been adversely impacted by COVID-19. The loan repayment terms have been softened, including a one-year grace period for starting repayments, covering 1,559 debtors, and an extension of the grace period by an additional six months, covering 1,210 debtors, totaling 2,769 cases, amounting to approximately 44 million baht.

Ministry of Labor: This agency launched a project to protect workers in the non-formal labor sector in an ageing society. The aim is to help workers in this sector prepare for a financially-sustainable retirement. This project covered 8,609 people between the ages of 25-59 years. In addition, the project implemented occupational skills development for 13,191 entrepreneurs aged 60 years or over, using both in-person and online formats. The Ministry has promoted "Work-from-Home" by extending jobs for older persons which they can do from home, and providing essential equipment for these enterprises. The project provides online training to acquire professional skills.

The National Savings Fund: This fund has adjusted its deposit plans to be in line with the "new normal" COVID-era conditions by developing information technology systems to provide services through online channels and increase call center services by adding phone lines.

#### 3.1.2 Mental well-being

Mental health care includes measures that should be implemented proactively since sufferers do not always want to seek help or do not know that they can receive help. Once reached, there needs to be ongoing monitoring of the mental state of those affected by COVID-19. There is a cadre of volunteers to conduct home visits and, therefore, are an important mechanism to help older persons receive proper care, assistance, and knowledge to lead a quality life.

**Department of Mental Health** together with the Department of Health of the Ministry of Public Health, has organized activities to provide mental health care through the network of Tambon Health Promotion Hospitals (THPH) and community health centers, with the following activities:

- (1) Mental Health Check-in: The Mental Health Check-in software is an online mental health assessment tool which is accessible on the website. There are applications to use this tool for the proactive assessment of mental health status. In 2021, 411,285 older persons filled out the form. The results indicate that 0.7% of respondents had stress, 1.0% were at risk of clinical depression, 0.3% were at risk of suicide, 1.5% had symptoms of burnout, and 1.1% had reduced willpower.
- (2) The program to build knowledge and skills for five dimensions of happiness through online channels, print media, and activities through Senior Citizens clubs/schools, including providing knowledge at home. A total of 496,188 older persons accessed knowledge from this program.
- (3) Screening for mental health problems through proactive outreach and passive reach through the static service providers in the public health service system.
- (4) Development of a care system for psycho-social health of older persons at risk of mental health problems. This system is being implemented through 7,352 THPH by developing the capacity of Village Health Volunteers (VHVs) to provide eldercare, with a focus on psycho-social health. Older persons at risk of a mental health disorder are referred to the Family Medicine Team. The VHV and Team have reached out to dependent older persons who are confined to the home or bed, with 87.7% being screened for clinical depression and 67.6% receiving psychological care.
- (5) Development of a surveillance and support system for older persons with dementia and behavioral problems in every community (district) hospital. Persons are recruited and trained to be Care Managers for older persons to conduct screening for cognitive decline, mood disorders, and difficulty carrying out activities in daily living. A total of 2,301 older persons who were confined to the home or bed were visited and assessed by the program.
- (6) Development of innovations in mental health knowledge for older persons, such as mental health standards in assisted living facilities, training in geriatric mental health care for nursing education students, and application of a mental performance enhancement program for older persons (Elderly Mental Fitness).
- (7) There is a system for follow-up of activities for older persons over the phone or via online channels.
- Ministry of Social Development and Human Security: The ministry launched the hotline project: "Call because we care." This hotline service helped nearly 4,000 older persons who were adversely affected by COVID-19, and nearly 200 were referred to Senior Citizens' care centers.

#### 3.1.3 Social welfare and the promotion of lifelong learning

The Thai government agencies and related entities have a number of important assistance programs, ranging from improving the local structural environment for older persons, and prevention and coping with COVID-19. There are programs that help manage religious rituals for households with older members affected by COVID-19, and support for lifelong learning, e.g., to access self-care knowledge even during the periods of lockdown or prohibition of group gatherings and activities. The following are some examples of these programs:

- The Department of Social Development, BMA, provided financial assistance to cover the cost of funeral management of 1,000 older persons, totaling three million baht.
- The Center for the Development of Social Welfare for Older Persons has helped renovate 20 public places so that they are age-friendly and safe for older persons. This includes the creation and distribution of media with guidelines and techniques for eldercare, including the prevention of COVID-19.
- The provincial branches of the MSDHS and the Social Welfare Development Center for Older Persons prepared a manual for safe homes and new ways of life to adjust the environment to be more appropriate and safer for older persons.
- The MSDHS organized a meeting to exchange learning about the operations of the Time Bank approach, and to develop technology to support Time Banks in 114 areas with 4,182 Time Bank members, as well as to support 1,573 vulnerable households affected by COVID-19.
- The Senior Citizens' Council of Thailand has 76 branches nationwide, plus branches in six districts of Bangkok. During the height of the COVID-19 pandemic, many hospitals were filled to capacity, and alternative holding centers were urgently needed, especially for older patients and contact cases. Accordingly, the Council provided 334,250 baht to help create field hospitals, which benefitted 7,475 older persons. The Council provided 10,500 baht for travel expenses for older persons who were discharged from the field hospital and needed to return home. The Council distributed "survival kits" to 1,147 older persons who were bed-ridden. In addition, the Council prepared "Sharing Pantries" which benefitted 26,210 older persons, and the Council provided 7,219 older persons with seeds and supplies for planting a kitchen garden.

The Thai Health Promotion Foundation (ThaiHealth) has supported the preparation of educational materials for safe living during COVID-19, with components that are tailored for older persons. This content can be accessed on the ThaiHealth website and via the LINE application. The "Retirement Classroom" course contains four key learning modules: 1) Knowing changes in the body as we get older; 2) Realizing adjusting and improving the environment to be age-friendly; 3) Wanting to know and participate in activities that provide awareness of the value of life; and 4) The "Digital Older Persons" module which covers the topics of health, food and medicine; social well-being, physical and mental health; environment, housing and community; and enhancing life experiences in the economy and at work.

#### 3.1.4 Prevention and screening

During the COVID-19 epidemic, it is important for everyone to be educated on prevention and how to live daily life with the least risk of contracting and transmitting the COVID-19 virus. At the same time, the providers of care to older persons must know how to self-screen for COVID-19 risk before having close contact in the process of eldercare.

The Department of Health of the MOPH provides COVID-19 prevention education for managers of care for older persons, eldercare providers, and community eldercare volunteers. This includes guidelines for taking care of older persons through phone contact, video clips, and other remote communication channels. The DOH also provides education on COVId-19 infection control for assisted living facilities operated by the government, the private sector, and civil society organizations. People can conduct their own self-risk assessment for COVID-19 by using the Thai Stop COVID+ instrument. This tool has been applied in over 300 assisted living facilities, and 13,535 places of worship. There are online media platforms to educate older persons and family members on how to stay safe from COVID-19.

The MSDHS organizes training for volunteers (with a focus on eldercare). So far, a total of 4,405 volunteers have been training in eldercare in the context of COVID-19, and these volunteers have a coverage population of 66,075 older persons.

The Senior Citizens' Council of Thailand provides knowledge on how to protect oneself from COVID-19 which is targeting nearly 30,000 members of Senior Citizens' clubs around Thailand. The information includes an orientation on the COVID-19 vaccine. Over 90,000 educational brochures have been published, and this has benefitted over 50,000 older persons. The Council has conducted over 750

public information dissemination actions which have benefitted nearly 70,000 older persons. In addition, the Council has procured and distributed personal protective equipment such as hand sanitizer, which has been distributed to over 12,000 older persons, and sanitary masks for nearly 40,000 older persons.

The Department of Medical Sciences of the MOPH has prepared personnel and laboratories at 225 locations across the country to administer rapid diagnosis of COVID-19 infection. In addition, VHVs have been trained to be "community clinicians" to help villagers accurately administer the ATK test kits by themselves.

The Department of Social Development of the BMA oversees the Bang Khae 2 assisted living facility which has 120 female older persons. However, the capacity of the facility is limited and there are strict measures in organizing the activities in order to minimize the risk of spread of COVID-19.

# 3.1.5 Treatment and care

Patient care needs are a top priority, and accessibility issues have been identified. The government has increased its coverage of the eldercare and treatment area, and has introduced technological innovations to help in the work.

The DOH, BMA, and local administrative organizations (LAO) have collaborated in the implementation of over 100 Community Isolation (CI) centers in Bangkok and nearly 600 CI centers in the Regional Health Zones #1-12, which are temporarily set up in monasteries, schools, gyms, large auditoriums, and construction workers camps.

The MSDHS established 38 community holding centers for vulnerable groups in five provinces, with 259 beds allocated for older persons affected by COVID-19. In addition, the MSDHS supports the development of older persons through centers administered by 214 LAOs. These centers have been expanded and upgraded so that, now, there are 324 Centers for the Development of Quality of Life and Occupational Promotion for Older Persons in 64 provinces.

The Department of Older Persons of the MSDHS has borrowed the Chula-Aree Ninja robot from Chulalongkorn University to take care of older persons in the Social Welfare Development Center of Pathum Thani Province to reduce exposure to COVID-19.

# 3.2.1 Department of Health, Ministry of Public Health

The DOH assessed the health status of the older persons in Thailand and found that 7,433,596 were still active outside the household, and can meet with neighbors, people in the market, and casual acquaintances. However, the assessment also found that there were 207,024 older persons who were essentially limited to their own household but could perform some or all activities in daily living. Finally, 46,779 older persons were bed-ridden or needed full-time assistance for activities in daily living. The following are some of the projects and interventions which the DOH is implementing to boost or maintain the health status of older persons:

- (1) Prepared a wellness plan for older persons who are socially connected, e.g., through Senior Citizens' clubs, by organizing activities for 48,428 older persons out of a target of 15,000 people (as of August 31, 2021).
- (2) Supported the development of a model city/community that is age-friendly in 45 locations distributed across the 13 Regional Health Zones and integrated activities with LAOs and network partners.
- (3) Developed the Long-term Care (3C) program information system for the older persons who are bed-ridden, with 15,114 registered care managers, 94,968 caregivers, and 2,205 eldercare volunteers (as of December 30, 2021).
- (4) Supported the Tambon (sub-districts) that have a system for long-term care (LTC) of older persons. The DOH assessment found that 96.4% of the Tambon had met the MOPH criteria for proper LTC, or 6,997 out of a total of 7,255 Tambon.
- (5) Supported the development of care plans for dependent older persons, covering of 326,437 out of the total number of 364,410 dependent older persons, or 92.1% (as of December 30, 2021).
- (6) Developed an application for older persons (i.e., the "Blue Book Application") as a health record of each older person.

# 3.2.2 Department of Health Service Support, Ministry of Public Health

Advocated for a seamless system of support for older persons in the community in seven pilot locations: Tha Wung District, Lopburi Province; Wihan Daeng District, Saraburi Province; Muang District, Phetchabun Province; Pak Chong District, Nakhon Ratchasima Province; Muang Rayong District, Rayong Province; Trang City, Trang Province, and Amphawa District, Samut Songkhram Province. An operations manual was prepared for each pilot site to support implementation, with an accompanying instructional video. As of this writing, the two areas with the most outstanding performance are Tha Wung District, where the "Maneevej" approach has been applied to care for older persons with mobility problems, and Amphawa District, which is applying the SABAIDEE approach to screen 1,166 older persons.

# 3.2.3 Ministry of Social Development and Human Security

- (1) The work is integrated with other government agencies and the Social Welfare Development Center for Older Persons by applying Thai technology and innovation to enhance the quality of life. The pilot activities are in the following six centers: Ban Bang Khae Center, Bangkok, Ayutthaya Province Center, Ban Bang Lamung Chonburi Center, Thammapakorn Chiang Mai Center, Buriram Province Center, and the Phuket Province Center.
- (2) The MSDHS organized a series of 18-hour training sessions to provide knowledge in various fields in the care of 3,600 older persons in the implementation area.
- (3) The MSDHS provided aid in the management of traditional funerals for 7,000 older persons, amounting to 21 million baht, operated by the Provincial Social Development and Human Security Office and the BMA.
- (4) The MSDHS gave survival kits to 12,560 older persons in difficult circumstances, amounting to 37.5 million baht. In addition, the MSDHS sponsored repairs to older persons' houses so that 4,000 older-person residents could be safer. This was implemented by the Provincial Social Development and Human Security Offices and the Social Welfare Development Center for older persons in the implementation sites.
- (5) The MSDHS organized training to build the capacity of committee members of the Center for Development of Quality of Life and Occupational Promotion for Older Persons, with 205 trainees, and organized meetings to educate staff of the provincial branch offices and older persons' centers, covering 26,983 people, on the topic of the "New Normal."

# 3.2.4 Older Persons' Fund

In FY2021, a total of 8,158 older persons received loans from the Fund in the amount of 231 million baht. In addition, the Fund provided grants/loans to 108 Senior Citizens' clubs, organizations, and network partners in the amount of 17 million baht, mostly to organize activities to promote the capacity development of older persons.

# 3.2.5 Department of Older Persons, Ministry of Social Development and Human Security

The Department supported the following activities to help build the capacity and preparedness of Thai older persons:

- (1) Organized meetings to prepare Thais of all age groups across four generations to prepare for quality aging
- (2) Encouraged older persons to register as members of the Corpus of Older Persons' Wisdom. In 2021, nearly 5,000 older persons registered, bringing the cumulative total to 33,831 people.
- (3) Promoted professional network cooperation with 379 Senior Citizens' clubs.
- (4) Promoted and built the capacity of 231 Senior Citizens' clubs, enabling continuous activities and transferring useful knowledge to the community.
- (5) Prepared a product catalog for 352 older persons under the project: "Products based on Traditional Wisdom for Older Persons"

# 3.2.6 Ministry of Labor

The Ministry promoted the employment of 70,527 older persons by helping them apply their traditional wisdom, and helping them to access support from the Senior Citizens' Fund. The Ministry supported networking for careers and occupational cooperation based on principles of protection of legal rights. This benefitted 8,609 older persons through the network of informal workers protection in an aging society. There was skills development for older persons to increase career opportunities, both in-person and online, for 13,191 people. The aim is to enable older persons to remain actively employed for as long as possible so that they can be self-reliant, as well as a positive force for the economic development of the nation.

# 3.2.7 Ministry of Culture

The Ministry organized activities for the older persons aged 60 years or over, aiming to enhance the learning of arts and culture for older persons who are interested in participating in online activities via Facebook. Activities organized include physical yoga, tai chi, photography techniques, dance, singing, and Thai astrology, and older volunteers by providing training every day in the morning and in the afternoon. In 2021 alone, there were 132,734 views of this web page.



# Highlighted Situation in 2021

Each year, there are important events about Thai older persons (i.e., age 60 years or older) that deserve to be recorded. This chapter highlights some of the stories of the energetic and invaluable older persons, government, and non-governmental organizations working effectively for the ageing society, the heightened awareness of public media, the use of information technology, and inventions/innovations to build quality of life for older persons.

# National Older Persons for 2007-2021

Since 2007, the National Committee on Older Persons has recognized an outstanding Senior Citizen of the year. Candidates are older persons who serve as role models, and have made contributions to society as a whole, continuously and for a long time, and display exemplary morals and ethics.

# List of honorees as "National Older Persons"



2007 Phra Brahmamangkalajarn (Panyananthaphikku) (1911-2007)



Prof. Dr. Sem Pringpuangkaew (1911-2011)



Thanpuying Poonsap
Noppawong (1910-2015)



2010 Prof. Rapee Sakrik (1922-2018)



Thanpuying Sumalee
Chatikawanich (1931-present)



2012 Mrs. Saisuree Jutikul (1934-present)



2013 Prof. Dr. Prasert Na Nakorn (1918-2019)



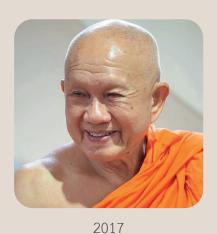
2014 Mr. Pan Israsena Na Ayudhya (1927-present)



2015 Chao Duangduen Na Chiang Mai (1929-present)



2016 Mr. Sanoh Unakul (1934-present)



Somdej Phra Buddhakosachan (P.A. Payutto) (1938-present)



2018 Dr. Sumet Tantivejkul (1939-present)



2019 Banloo Siriphanich, M.D. (1925-present)



2020 Mr. Nawarat Pongpaiboon (1940-present)



2021 Chek Thanasiri, M.D. (1925-present)

National Older Person for 2021

A role model for Thai society in 2021

Chek Thanasiri, M.D.

Born on October 11, 1925 in Bangkok.

Married to Wilit Wiranuwat, M.D., and has three children.

# Education

- Primary School: Depsirin School
- Secondary School: Depsirin School; Suankularb Wittayalai School
- Bachelor's degree: Faculty of Medicine, Siriraj Hospital
- Master's degree: Faculty of Public Health, Mahidol University
- Continuing education in public health sciences,
   Johns Hopkins University, Maryland, USA.

# **Employment**

- Assigned to the Venereal Disease Control Division,
   Department of Health, 1952
- Provincial Chief Medical Officer, Nakhon Ratchasima
   Province, 1954-1963
- Member of the National Legislative Assembly, 1973
- Director of the Council of Social Welfare of Thailand, 1973
- President of Siriraj Medical Alumni Association, 1980-1982
- Director of the Health Department and Deputy Permanent Secretary, Bangkok Metropolitan Administration, 1981-1986
- President of the Planned Parenthood Association of Thailand, 1976-1977
- Member of the National Economic and Social Development Board (National Public Health Planning Commission) various years



"I am very careful with the food I eat. We must eat the right food.
The focus should be less on meat and more on vegetables and fruit.
One must exercise regularly, and practice calming the mind.
Most importantly, one must take care of one's health to the best extent possible. One should not invite problems into one's life, and be self-reliant for as long as possible."

"Eat just enough, die hard...Eat too much, die easy"

"I started to take better care of myself starting around the age of 35. I am an athlete, and I have never been seriously ill or injured.

I like to work, while others take sick leave. I never take leave.

I run, swim, hike up hills, and walk through valleys. When I reached middle age, I set a personal goal to live a healthy, quality life until at least age 120 years."

# Honors and Awards

- Mahidol Award from Mahidol University Alumni Association, 2003
- The 6<sup>th</sup> Narathip Award, 2006

# Royal Insignia

- Knight Grand Cordon (Special Class) of the Most Exalted Order of the White Elephant
- Knight Grand Cordon (Special Class) of the Most Noble Order of the Crown of Thailand
- The Chakrabarti Mala Medal

Chek Thanasiri, M.D. has written numerous books, including the series "How to Eat and Stay Safe from Diseases," "This life is amazing and wondrous." "How to take care of yourself to remain healthy, happy, and free from disease for at least 100 years," "How to be free from disease and slow down aging," "How to live a long and happy life," "Concentration on quality of life," "The Nature of Life," "Optimization of Life," "The ultimate life force," "22 days of adventure in the African Rainforest and the Slave Island of Zanzibar," and "The Secret to Living Over 100 Years," among many other volumes.











# National Artists of the Year 2021

Every year, the Department of Cultural Promotion of the Ministry of Culture announces the appointment of national artists to honor those whose works of art have enriched the public sphere. The artists are recognized for their original creations and perpetuation of the fabled arts of Thailand. These artists are helping to preserve, promote, and transmit the arts to the next generation in each field. These artists are also role models for their exemplary morals and ethics through their expression in the arts.

This year, the Department of Cultural Promotion has announced the list of "National Artists" for 2021, and who come from three fields: Visual arts (4 people); Literature arts (2 people); and Performing arts (6 people). Of these 12 artists, ten are over 60 years old. The following are highlights of these national artists.

# Literature

# Nantaporn Shantikasem

Literature (pen name Piyaporn Sakkasem)

Born on November 23, 1955 in Chonburi Province

She has excellent skills in writing novels and short stories. She crafts her chapters carefully, using literary techniques and exquisite language to encourage readers to follow the plot without wanting to put the book down. Some of her outstanding novels include Under the Shadow of the Sun, Bamboo Branches Bai Rak, Under the Shade of the Tree, and Baan Roi Dok Mai.





Wicha Lunachai

Literature (Pen Name: Prachakhom Lunachai)

Born on December 15, 1959 in Ubon Ratchathani Province.

He has authored numerous works that have won more than 30 literary awards. The novel Fang Saeng Chan was selected as a part-time reading for students in secondary schools under the Ministry of Education.

# Visual Arts

# Wannee Chatchawantipakorn

Visual Arts (Photography)

Born on December 21, 1955 in Bangkok.

She has an outstanding talent in photography with a belief in the work of photographic art that "Art is born from experience and practice through observation and experimentation."



### Thavorn Koudomwit

Visual Arts (Printmaking)

Born on July 31, 1956 in Bangkok.

His compositions are famous for the series of graphic artworks, such as the Impressions of the Past. These include a set of symbols used in rituals, a set for worship, a set for prayer, and a set of memories from Turkey, among others. He is an artist who is committed to creating personal works, and devoting time to teaching. He has been awarded recognition as a "Distinguished Artist."

### Ornsiri Panin

Visual Arts (local architecture)

Born on 19 February 1944 in Lopburi Province.

She has outstanding works in the creation of vernacular architecture. Her works appear in a variety of books, texts, research papers, and other documents which depict local houses and villages in the area of Phra Nakhon Si Ayutthaya, traditional Thai-Mon folk houses, and the floating villages of Thailand. She has produced numerous drawings and watercolors, including architectural design.





# Mechai Taesucharia

Visual Arts (weaving)

Born on December 24, 1958 in Ubon Ratchathani Province.

He is famous for designing woven fabrics which are typical of Isaan (Northeast Thai) fabrics. He develops fabric patterns to be suitable for use in making clothes. He invented the Kab Bua pattern fabric from the traditional weaving technique of Ubon Ratchathani Province. He has designed and improved tools used in weaving. He produces graphic design works for Buddhism and charity.

# Performing Arts

### Thamnit Nikhomrat

Performing Arts (Nora)

Born on September 19, 1959 in Songkhla Province.

This art form embodies a graceful style that is beautiful to admire. The art form embraces a body of knowledge to create a new Nora performance. Thamnit performs in the Nora and writes lyrics. Tamnit is a renowned show designer and director, and has been honored as "Outstanding Person in the Arts and Culture" by many agencies, such as the Rajamangala Praise Award for Outstanding Artist, Songkhla Province Diamond Siam Award, and the Southern Thai Philosopher Award.



# Kampun Nithiworaphaiboon (or Kampun Ban Taen)

Performing Arts (Korat Song)

Born on December 1, 1951 in Nakhon Ratchasima Province.

Kampun is a specialist in the traditional music of Korat who has outstanding knowledge in singing, acting, and songwriting. He is considered a traditionalist with all-around artistic abilities. His most important creative works are the adaptation of Korat songs to contemporary music, and this has become a widely known type of entertainment. He has composed numerous Korat songs, and folk songs in the Korat dialect, among others.

# Paitoon Kameng

Performing Arts (Thai Dance - Khon Drama)

Born on September 12, 1951 in Phra Nakhon Si Ayutthaya Province.

He is a person with knowledge and ability which has earned him acceptance and respect in the dramatic arts industry. He is a role model for the new generation of youth who study Thai traditional Khon drama, and has been regularly chosen to portray the protagonist of the play. He has participated in both the conservation and development of works in the Khon tradition and Thai theatrical performances.





Noppol Komarachun

Performing Arts (movies and dramas)

Born on December 14, 1953 in Bangkok.

As a leading actor, he is recognized in the Thai film and TV drama industry. His notable performances on film include Epring, Khon Rueng Muang, Rak Phayabat, and Khang Daeng. His work in TV series include Si Paen Dinh, Dong Manute, Thong Prakai Saet, Blood of Khattiya, Evil, Broken Sky, Blood Line, Lod Lai Mangkon, and La. His works as the producer of dramas include Lai Hong, Gratitude, Yaowarat in the Rainstorm, Kep Paen Din.

# Narongrit Thammabutr

Performing Arts (International Music - Classical Composition)

Born on November 25, 1962 in Bangkok

His work consists of a large-scale contemporary classical repertoire, including 9 orchestra symphonies, 5 concertos, 10 symphonic poems, and chamber music. His uniqueness is the combination of outstanding characteristics of Thai and Asian music styles, as blended with contemporary classical music. His compositions have a beautiful melody that is pure, clear, provocative, and colorful, with orchestral sounds like no other composer.





Sala Khunwut

Performing Arts (International Thai Music - Composing Thai Folk Songs)

Born on April 2, 1962 in Amnat Charoen Province.

He is a multi-talented artist who creates profound lyrics set to folk music. Has composed thousands of songs, such as Parinya Jai, Long-Tang Krathong, Medicine for the Poor, Shoes in Front of the Room, Are you tired, good people? and Not a fan, can't do it instead, among many others.

# On January 27, 2021, three ministerial regulations were announced on the establishment of standards for the care facilities for older persons

Other chapters in this volume have pointed to the very rapid increase in the number and proportion of the Thai population of older persons, and this trend will only become more pronounced in the coming years and decades. Thus, it is inevitable that the number of dependent older persons will increase as well. Thailand needs to accelerate preparations for this emerging care burden. In 2020, the Ministry of Public Health (MOPH) issued three ministerial regulations concerning the business of caring for older persons as children of the Health Workplaces Act 2016, namely:

- 1. The Ministerial Regulation prescribing the care business for older persons or people with dependence is another business in the health business establishment.
- 2. Ministerial Regulations prescribing standards for places, safety, and service provision in a health establishment in the category of care for older persons or people with dependency
- 3. Ministerial Regulations prescribing fees and payment of fees in connection with the operation of health business establishments (No. 2)

These three ministerial regulations were announced in the Government Gazette on July 31, 2020 and came into effect on January 28, 2021.

Care facilities for older persons or people with dependent conditions can be classified into three types:

- 1. Providing care, health promotion, and rehabilitation activities during the day without overnight stay (daycare)
- 2. Providing care, health promotion, and rehabilitation activities in an assisted-living facility (residential home)
- 3. Providing palliative care, health promotion, and rehabilitation around the clock (nursing home)

# The COVID-19 pandemic has exposed non-standard practices in the care of older persons

In 2021, standards under the ministerial regulation relating to the care facilities for older persons are already in effect. However, it is a certainty that Thailand has hundreds of facilities which are caring for older persons but have not yet registered for permission to provide eldercare.

In August 2021, while COVID-19 was spreading heavily, people were understandably very concerned about being infected with this lethal disease. For example, there was the news report of villagers in Khlong Luang Phaeng Community, Muang District, Chachoengsao Province who alerted the authorities that there was a facility near the community that was housing older persons, but which had unhygienic conditions, and seemed to be at risk of an outbreak of COVID-19.

When officers inspected the facility, they found the reports to be true. The environment inside this unauthorized eldercare facility was unhygienic and did not come close to meeting the official standards. Indeed, ten residents were already infected with COVID-19, and two of the four care providers were also infected with COVID-19.

In January 2022, two more sub-standard eldercare facilities were discovered.

The first establishment was located in the Lat Krabang area, a suburb of Bangkok. The operators were using a derelict building to house dependent older persons. The area in and around the building had piles of construction scraps and garbage. When it was discovered, this facility had 20 residents, two of whom were bedridden. The second establishment was located in a two-story building which, from the outside, appeared as an ordinary rental apartment building on Suwinthawong Road, Nong Chok District, Bangkok. Upon inspection, it was found that the interior was unhygienic, and had 21 older persons in residential care, many of them bedridden, and one was chained. It is noteworthy that, when the officials contacted the family of residents to pick up their relatives from this care facility, only 15 of the 21 occupants had relatives willing to take them in.

000

These three cases of sub-standard eldercare facilities are certainly just a small fraction that exists today in Thailand. The fact that these facilities exist points to the worsening situation that the demand for residential care for older persons is rapidly exceeding the supply. In such an imbalanced situation, the concept of registration and standards has less meaning.

"The near-term challenge for Thailand is the creation of enough affordable assisted living facilities for older persons that meet the quality standards. This is a challenge that must be met."

000

The Ministerial Regulations prescribing standards for places, safety, and service provision in a health establishment in the category of care for older persons or people with dependency (2020).

This regulation was issued under the Health Establishments Act of 2016 Article 3(3).

which came into effect on January 27, 2021.

All new eldercare business operators must apply for a permit before opening. In addition, the operators of such establishments must pass a training course and obtain a license from the Department of Health Service Support of the MOPH. The following are standards specified in Section 1 of the ministerial regulation.

# Section 1 Standards for the facility

**Item 1:** Health establishments for care facilities for older persons or people with dependency must have general characteristics in relation to the location as follows:

- (1) The facility is located in an area that has a safe environment that is not harmful to health and has a way to conveniently enter and exit
- (2) The building and surroundings are suitable for service recipients, as well as being free from nuisances that may interfere with the clients' well-being, and with services that are carried out in accordance with the law on building controls and/ or the law on public health
- (3) The service area inside and outside the healthcare establishment has the following characteristics:
  - (a) There is a walkway of a width not less than 90 centimeters
  - (b) The place is clean and tidy
  - (c) In the case that the building has multiple businesses in operation, the healthcare service area must be clearly demarcated, and other business operations must not interfere with the healthcare service
  - (d) There must be common areas for service recipients and staff for various activities or recreation
- (4) In the case of a health establishment providing multiple types of services in the same building, there must be a clear division of service provision type, and the space and characteristics must be appropriate for the service standards of each separate discipline
- (5) There is a service component to provide alerts/alarms, and facilitate conveniences
- (6) There is the appropriate management of solid waste, sewage, and wastewater according to relevant laws
- (7) There is a system to control disease vectors in accordance with sanitation principles
- (8) he service area must have adequate lighting and ventilation, and must not have a musty smell
- (9) Bathrooms must have the following characteristics:
  - (a) The door is of an outward-opening or sliding type with net width not less than 90 centimeters. The lever or push handle for the door can be opened from the outside. There is no door control device that operates separately, and there is no threshold to step over to enter
  - (b) The surface level inside the bathroom is even and smooth, and always level with the outside floor, and not slippery or having standing water

- (c) If there is a squat latrine, it must not be less than 40 centimeters above the level of the floor but not more than 45 centimeters. There is a backrest and handrails on at least one side of the wall for support
- (d) There is a hand-washing basin that is not more than 80 centimeters above floor level. There are handrails on the side of the basin to provide balance while standing. The faucet has a lever, swivel, or automatic on-off system
- (e) The shower or bathing area: The height of the seat from the base of the bathtub/shower is not less than 40 centimeters and not more than 45 centimeters. There must be a stable backrest with handrails on the sides of the seat to aid in buoyancy. Shower/tub faucets are of a lever, swivel, or automatic type
- (f) There is an emergency call signal in the bathroom
- (g) There is a safe water heating system
- (h) There are handrails from the door to the toilet and the bathing area
- (10) Electrical wiring is properly organized, with the correct type of power cable that complies with rules for safe use of electricity as follows:
  - (k) The switches and wires are maintained in a good and safe condition
  - (l) There are lines or boundaries indicating areas that may be dangerous or prohibited to approach/touch
  - (m) There is a power cut-off device to activate in the event of electric shock or leakage
  - (n) There is a proper lighting system, with adequate lighting in the sleeping area, bathroom, and general living area
- (11) Furniture must be safe for use and does not have the risk of causing harm. If there are sharp corners, there must be rubber bumpers to prevent injury
- **Item 2:** The healthcare facility for older or dependent persons can accommodate overnight residents. This type of facility must have all the characteristics of Item 1, and must have a service unit to coordinate, provide alerts/alarms, and provide services around the clock.
- **Item 3:** The healthcare establishment for older or dependent persons is a nursing-home facility and has the characteristics of Items 1 and 2, and the width between the patient beds must be not less than 90 centimeters.

000

# 4.4

# Private Companies have More Projects to Employ the Older Persons

The Thai population is aging rapidly as the size of the cohort of older Thais continues to grow. In addition, the government's policy is to promote active and gainful ageing. One measure to help achieve the goal of that policy is to retain older persons in the labor force as long as possible. In addition, creating jobs and hiring older persons is an important mechanism of this policy. The added income will help keep older persons self-reliant and boost their self-esteem.

Today, one can observe that many older persons are still working -- by choice -- in such occupations as trade, wage labor, and agriculture.

For the formal labor force, in 2019, the Ministry of Labor signed a Memorandum of Understanding on Employment Promotion for Older Persons with 12 private companies, including 23 employment agencies, to place qualified older persons in the formal labor system.

This year's report on the Situation of the Thai Older Persons highlights private sector businesses that are hiring older persons.

### HomePro

HomePro has a project for older employees called "Young smart." HomePro believes that experience is more important than age. It gives extra opportunities for people aged 60 years or older to maintain good physical and mental health, demonstrate their service-minded attributes, and have the option to choose which shift they work. The job openings for older persons include salesperson, cashier, and customer service representative.



Source: https://www.thairath.co.th/news/local/1593540

# PTT Oil And Retail Public Companies Limited and Sarn Palung Social Enterprise Company Limited

The Amazon Café for Chance store format provides opportunities for the underprivileged groups, including abled-body older persons, to have a career and income, as well as feel proud of themselves in being productive. Working in Amazon Café outlets gives Thai older persons (age 55-65 years) the opportunity to work as baristas. These employees receive both theoretical and practical training together with the younger hires. In addition, the interior of the shop has been designed to be suitable for the age range of employees of different generations, such as the height of the supply shelves for easy handling, the use of an automatic coffee machine to increase convenience and maintain the standard taste, as well as providing first aid equipment for emergencies.





Source: https://www.khaosod.co.th/lifestyle/news 5117108

The Amazon Cafes which strive to hire older persons as baristas can be seen at the Department of Social Development and Welfare of the Ministry of Social Development and Human Security (MSDHS), Phaholyothin Km. 56 branch, Wang Noi District, Ayutthaya Province, the 100 Centennial Park branch, Chulalongkorn University, the Ratchada 17 branch in the Bangkok PTT gas station, and the Nong Hoi branch, in Chiang Mai Province.



Source: https://www.sentangsedtee.com/exclusive/article 121492

# Big C Super Center

This supermarket chain operates throughout large cities in Thailand, and has launched a project called "Our Older Brothers and Sisters are Strong" which gives preferential hiring to older persons. The project is based on the philosophy that "age is just a number...but the experience is the real thing."

### SE-ED Book Center

The network of SE-ED Book Centers has a project called "The fire burns strong, even at age 60 years." This project values the attributes of older persons, and is actively recruiting people who are aged 50 to 60 years who have at least three years of high school education. This project is being implemented at all SE-ED Book Centers nationwide.



Source: https://themomentum.co/seniors-se-ed-book/

In addition, there are also many private businesses that are open to hiring older persons such as Grab Car, Tesco Lotus, Central Group affiliates, and IKEA, among others. These programs are an important mechanism to help seniors who have passed the mandatory retirement age of their previous employer to continue working in gainful

employment, both for economic self-sufficiency as well as self-esteem and social contact. These programs will contribute to the economy, reduce dependency, and set a good example for an aged society.





Source: https://shorturl.asia/xCT1S (left), https://shorturl.asia/PCKcB (right)

# Survey of the Older Persons in Thailand 2021

The Thai National Statistical Office (NSO) has conducted a series of national surveys of the older population. The most recent (7<sup>th</sup>) round was conducted from October to December, 2021.

The survey is a national sample of the population aged 50 years or older living in more than 80,000 households across the country. The sample is representative of the elderly population nationally. The survey questionnaire records demographic and socio-economic characteristics, health status, support of older persons, security of life and property, basic needs that are essential for life, the need for assistance in various dimensions, having a caregiver, and care provider knowledge of how to properly care for older persons.

The 2021 Survey of Older Persons is an important source of information on the situation of older people, and helps inform planning and programs to more fully support the aged society that Thailand is becoming.

Year 1994 2003 2007 2011 2014 2017 **202**9

# Interesting findings from the 2021 survey

Top **5** provinces based on a proportion of the population who is older persons

1 Phrae	29.3%
2 Uttaradit	29.0%
3 Uthai Thani	28.9%
4 Pichit	28.8%
5 Lampang	28.6%

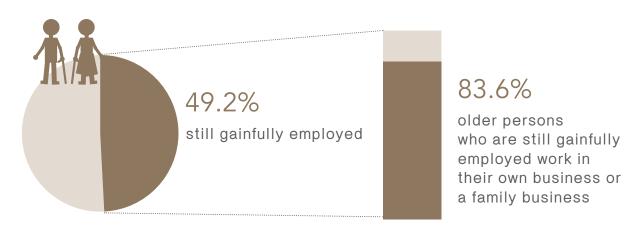
2 Decreased dependency ratio
(1 older person : per number of working-age persons)



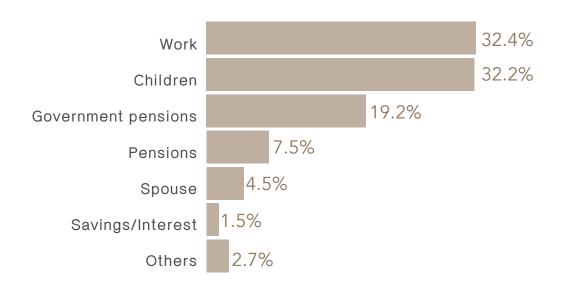
3 1 in 3 of the older population live alone or live with a spouse alone



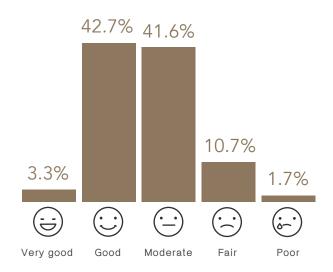
4 Nearly half of the population aged 60-69 are still working



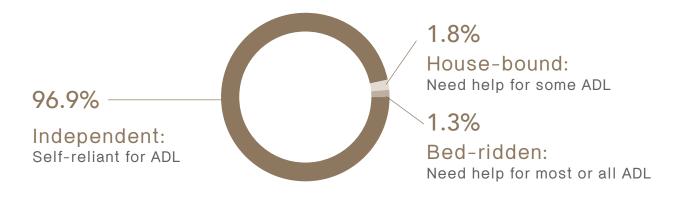
The main source of income for older persons comes from working is similar to the income they receive from their children.



6 46% of older persons assessed their health as good to very good.



Ability to perform activities in daily living (ADL)



7 The older you get, the more caregivers are needed.

35.6% The old-old have a care provider

11.4% The middle-old have a care provider

4.0% The young-old have a care provider

1 in 10 of the older population has a caregiver.

59.9%

of the care providers are a child of the older person.

4.6

# Innovations and Inventions to Improve Quality of Life for Older Persons

# Innovations/inventions for older persons that were supported by the National Research Council and available in 2021

Innovation to assist physical rehabilitation in older persons and patients with a cerebrovascular disease with muscle atrophy

Assoc. Prof. Tirapat Limbunreuang, Srinakharinwirot University

The device helps rehabilitate components of the forearm to the hand and finger in patients with cerebrovascular disease or older persons with muscle atrophy or inability to control movement so that they can move more smoothly by themselves.





Developing innovations that support visual life for older persons and people with low vision

Assoc. Prof. Dr. Pitchada Ketmek, Chulalongkorn University

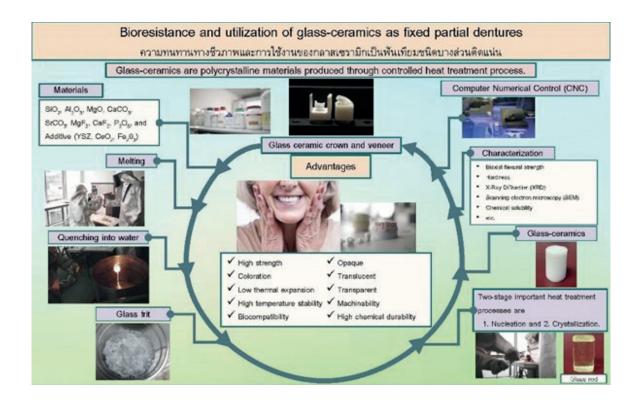
Developed LED lamps that can increase the contrast of color pairs. The enhanced lighting will help people with impaired vision, including older persons, to see more clearly, and which allows older persons to perform various activities, and move more easily and safely.

# Automatic ankle and leg lifting device

Asst. Prof. Nonnuch Luangpon, Burapha University

This is a physiotherapy device that assists in ankle flexion and automatic leg elevation. The aim is to prevent or reduce the shortening of the calf muscles in older persons or bedridden patients by increasing blood flow around the ankle to reduce swelling and screen for ankle infections.



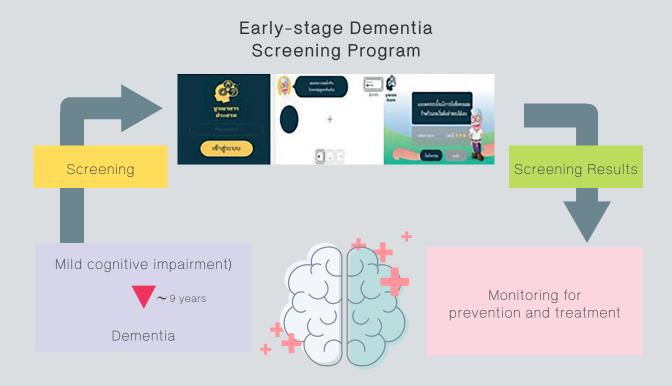


# Biological durability and functionality of glass ceramic as a fixed partial denture

Assoc. Prof. Dr. Duangrudee Chaisuwan, Kasetsart University

Glass ceramic has been developed as denture material by adding YSZ type Fe2O3 and CeO2 to be more durable. This compound can be used to repair or replace damaged or lost teeth, especially the teeth of older persons.





Development of a rapid early-stage dementia screening for older persons in the Eastern Special Development Zone community using EEG and machine learning

# Dr. Peera Wongupparat, Burapha University

This screening program for dementia involves tasks in the integration of images and sounds by older persons. The method should improve accuracy in classifying older persons who are at risk for dementia. This feature has the advantage of using machine learning and being able to connect to an EEG reader.



# Innovations for older persons designed by the National Science and Technology Development Agency (NSTDA), such as:



M-Wheel: Peripheral device that converts a general wheelchair into an electric wheelchair

## Dr. Danu Prommin

This device was developed to give wheelchair users who still have use of their upper body a better chance for basic mobility. This device can store an electrical charge for 8 hours, and can convert a regular wheelchair into a motor-powered chair that can cover 20 kilometers.



# Adjustable bed (Jo-Ey)

# Dr. Sarawut Lertpalangsanti

This bed helps to change the position of the user from lying down to rising, sitting, and standing comfortably, with high safety. It can be rotated to the left or right by 90 degrees. The user can press the remote control to adjust the bed, and press the command to turn the bed to the side to sit and eat or watch TV. This helps older persons to be more self-reliant. SB Design Square Co. has developed a state-of-the-art bed called Power Lift Bed.



# Viscosity Enhancer

# Dr. Chaiwut Kamolpilas

This product is used to add to water and other beverages to increase the viscosity as needed in order to make it easier to flow into the windpipe, not become stuck in the pharynx, or slip into the larynx which can cause choking.



Development of meat products that adjust the texture to make it easier to chew and swallow

# Dr. Chaiwut Kamolpilas

This "soft-textured meat" product is easily masticated by teeth or gums to make it easy to swallow. It is low in animal fat content, and nutritious. Its shape resembles natural food prepared from general meat products. It can be sliced or cut into pieces. It can be used to enhance a variety of dishes, and helps maintain the same feeling of consumption of meat.





# Ve-Chick Vegetable-based chicken meat substitute

## Dr. Kamonwan Isarakara

This product is based on soy protein. It can be constructed to resemble chicken meat in consistency and flavor.

# M-Pro Jelly Drink High-protein beverage made from green beans

# Dr. Sirikan Wiset-Suvarnabhumi

Green-bean protein is processed to induce the desired protein structure, together with the use of hydrocolloids to help support the structure and distribute proteins to maintain good condition. This results in a jelly-like, high-protein drink from low amounts of plant protein.

# TV Programs about and for Older Persons



# Older Persons' Variety Show

This is a show that is a platform for sharing stories of interest for and about older persons. There is an exchange of wisdom and tips on transitioning smoothly into senior living. Topic areas include finance, health, lifestyle, travel, environment, and technology. The aim is to help persons make a seamless transition into and through their "sunset years" in skillful ways.

Broadcast every Monday - Friday from 09.30 - 10.00 on ALTV.

# Super Active

This is a TV program that empowers people to make the best use of their advanced years and see the value of everyday pleasures from living. The program creates participation for people of all ages (to make society aware of the value of older persons) and promotes harmonious co-existence.



Broadcast every Saturday - Sunday from 8:00 AM to 8:30 AM on Thai PBS.



# GenO(LD) Aging Together [smart classroom]

This program airs short documentaries that show the everyday reality of an ageing society by fostering an understanding of the components of the various age ranges of older persons in Thai society. The stories build a positive attitude toward the various stages of ageing, and provide guidance on preparing one's own life for quality ageing in the future.

Broadcast every Monday - Tuesday from 9:00 AM - 10:00 AM on ALTV.

# The Oldie Idol -- Older Persons Still Have Fire

This is a variety show that has content that appeals to both young and old. It aims to inspire and broaden perspectives on life for the new generation in order to be prepared to see age as just a number. Being older should not be viewed as an obstacle in life anymore. Senior hosts portray role models for being successful idols.



Broadcast every Satuday at 6:55 am on Channel 3.

# Older Persons in the Media

# 4.8.1 Senior athletes

Nowadays, people of all age groups attach great importance to exercise. There are many levels of sporting events both in Thailand and abroad. Thailand is giving greater importance to sporting events in the group of older persons as well. The country has a "Senior Games" event on nearly an annual basis. The latest event was the 14th Senior Games in 2020, or "Ko Ram Games." The 15th Games was scheduled for 2021, but has been postponed due to COVID-19.

Thus, this Report on the Situation of Thai Older Persons revisits senior athletes who were honored in previous years' reports.



Sawang Chanprahman

# 91 years old

Born on March 29, 1920, Khun Sawang is an athlete who continues to compete in both national and international track and field events to this day. His events include short sprints (100 meters), shot put, discus, and long jump. Khun Sawang has broken many records for Asian athletes in this arena.



Punchala Pradappong

# 93 years old

Khun Punchala was born in 1928 and is from Bangkok. She won a gold medal at the Swimming Masters

Source: Thaipos



Anan Eawcharoen

# 79 years old

Born in 1942, Khun Anan is a former national footballer who turned himself into a competitive swimmer, while managing to overcome Alzheimer's and Parkinson's diseases through exercise and sports.

Source: Manoottangwai Facebook Page

Source: Siamsport



### Niew Chanthamanee

90 years old

Born in 1931, Khun Niew is a sports champion who won medals for long jump, shot put, and discus. She stays competitive by taking care of herself through good nutrition and regular, vigorous exercise. Her goal is to train and compete until at least the age of 100, or even up to the age of 130, or whenever the body gives out.

Source: Manoottangwai Facebook Page

# Panitinad Kajornarunwong

74 years old

Khun Panitinad is a 74-year-old prize-hunting runner. Her life motto is: "Run wherever there is money" as an incentive to earn funds to pay for running expenses. She has been running for 30 years in all formats, including a mini-marathon, half-marathon, marathon, 10-hour ultra-run, or even running up the stairs of skyscrapers. Khun Panitinad has received more than 500 trophies with a total prize pool of more than 500,000 baht. Her real goal in running is to be strong and not to be a burden on anyone. She is an inspiration to the younger generation as well as her peers. She urges everyone to just get up and take care of their health by being physically active. Khun Panitinad wants to gain an entry in the Guinness Book of Records as the oldest marathon runner in the world.

Source: Manoottangwai Facebook Page



# 4.8.2 Senior influencers

Today's generation of older persons is becoming greater users of social media. According to the NSO, 48.4% of older persons use the Internet. Initially, most older persons get help from their children until they become self-reliant on their preferred digital platforms. Older persons use social media to keep in touch with family and friends. They like to post updates about their daily life and interests. These days, some of these senior social media titans are recognized as important influencers on such applications as Facebook, Instagram, Twitter, and TikTok.

# The following are some examples of Senior Thai Influencers in 2021:



Source: Manoottangwai Facebook Page

# 'Papa Chao' Chavalit Jarittham

Papa Chao is 65 years old, and the owner of Pa Pa Chao Cafe & Make-up Studio. He is a former company executive who turned to operate a coffee shop as his second career. His shop combines the small dream of Papa Chao and his daughter. They began to make plans for such an enterprise over 20 years ago, when Papa Chao was in his 40s. He could already envision life in retirement, and wanted to be sure he remained active, and not be a burden on the family.

## 'Aunt Ad-Kalaya is stable'

Aunt Ad is a retired teacher. At first, she lived idly at home because both of her children were traveling abroad. Over time, she became lonely, and her only "friends" were her books. However, one of her favorite books was 'How to Make Tie-Dye'. This book inspired her to take an interest in doing this art form, and she became quite an expert through trial and error. She was able to turn these skills into a real enterprise, developing the clothing brand BAANBAAN CLOTHES which are colorful and, most importantly, unique. Aunt Ad says she does the tie-dye as a devotion to art and as an alternative to loneliness. It is not really about making money. She hopes that everyone can find their calling, whatever it is.



Source: Manoottangwai Facebook Page



Source: Manoottangwai Facebook Page

# Aunt Eed-Sunanta Pongcharoen

Aunt Eed is a master gamer, even at age 70 years. She is a power player on the Ragnarok Internet platform.

She started exploring the online gaming world when her daughter opened a gaming and Internet salon in her hometown. That was when she was 57. Initially, she only intended to help manage her daughter's Internet salon after working as a merchant at the morning market. However, she couldn't help watching the gaming activity. She watched so much that she learned the best techniques from the young gamers who came to the salon each day. Now she is a champ.

# "Mae Tu" Prapaisri Thai-Panich

A 70-year-old TikTok'er, Khun Prapaisiri rose to fame through her "Mae Tu Cooking" channel with 93,000 followers. However, "Mae Tu" wanted a new challenge, and so she started to look into TikTok, which has become the latest rage among Thai youth. At first, she wasn't sure if younger viewers would be interested in her posts. But now she is quite skilled in making posts to the TikTok platform. Her philosophy is: "No one is too old to learn."



Source: Manoottangwai Facebook Page

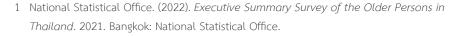
# จากข้าราชการเกษียณ ains Influencer แห่งจังหวัดพิษณุโลก อย่างน้อยครั้งหนึ่งแม่กับพ่อก็มีรูปสวย ๆ ไว้ให้ลูก ๆ หลาน ๆ ได้ดู

Source: Manoottangwai Facebook Page

# "Mother Chalao is stable" and "Father Chakri is stable"

Both members of this couple are 64 years old. They are both senior models on the Manoottangwai Facebook Page. Khun Chalao comes up with the ideas, and their daughter is responsible for sourcing the outfits and creating beautiful images. This couple has become Influencers. All their photoshoots have a story of love in the background, showcasing the mutual attention and concern between father, mother, and daughter. This way, they are making their "retirement" to be colorful. They have shown that a senior citizen who doesn't even know how to use simple digital technology can become an Influencer in society.

### References



2 National Statistical Office. (2019). Survey on the Use of Information and Communication Technology in the Household. 2021. Quarter 4. Bangkok: National Statistical Office.



# Research on Thai Ageing Society in 2021

Each year, there is a large amount of new research on Thai older persons. These research studies can be classified by their different academic fields, including science, social science, and behavioral science. These studies include reports of innovations, inventions, and artificial intelligence to improve the quality of life for Thai older persons.

The Report on the Situation of Thai Older Persons highlights research studies whose topics are relevant to the special theme of the annual report, and which were successfully completed or published in, or close to, the year of the report.

Accordingly, the research studies that are summarized in this 2021 Situation of Thai Older Persons Report are those that focused on the impact of the COVID-19 pandemic on older persons.

# Study of the impact of COVID-19 on older people's access to health services in Thailand<sup>1</sup>

Pattara Leelawarong, Peerawat Jinathongthai, Sutharn Chantawong, Yuthana Wongsalap, Kirati Kengkla, Araya Yanphiboon, Phakanan Ankab, Anchana Suramornrat, Ekaphop Mokprom, Arunotai Siriasawakul, Kumari Patchanee, and Nithijan Kittiratchakularaya.

Health Intervention and Technology Assessment Program (HITAP)

Year of the study: 2021

# Source of funds for the study:

National Research Council of Thailand via the administration of TGRI

# Objectives

To study the impact of the Thai COVID-19 pandemic on older people's access to health services in Thailand, and to inform policy recommendations for improving the health service system for older persons in the event of future COVID-19 outbreaks and emergence of other infectious diseases.

# Research methodology

This study examined four dimensions of health services for older persons: (1) Services in the outpatient and inpatient departments of hospitals; (2) Health promotion and disease prevention measures that are a basic service for older persons; (3) Special government programs that provide specific services to groups of older persons (such as the Royal Prostheses and Oral Health Promotion Project, and the project for cataract surgery in honor of His Majesty the King); and (4) Intermediate care, long-term care, and palliative care or end-of-life care. For the purposes of this research, the authors focused on these four dimensions of health in the management of a cerebrovascular disease.

### Findings of the research

During the COVID-19 pandemic in Thailand, the hospitals in this study established policies and measures that are consistent with the guidelines issued by the national COVID-19 Situation Administration Center and the Emergency Medicine Operations Center. All hospitals focused on reducing, eliminating, or postponing non-urgent medical examinations, procedures, and surgeries. Hospitals modified services, and introduced various methods/ technologies to compensate for a reduction of inter-personal contact. For example, hospitals use the Internet and smartphone applications to aid symptom monitoring and provide remote advice to patients, including coordinating referrals to receive specialized services. Each hospital has its own measures which are tailored to the severity of the COVID-19 pandemic in the province or locality as it changes over time.

When comparing services for older persons before and during the COVID-19 pandemic, the hospitals in this study reported changes in service utilization rates by different types of services. These changes depended on many factors, including individual factors of the patient, contextual factors, and service system factors. As for the health effects, the mortality rate of patients of all age groups who were eligible for national health insurance was not different from the pre-epidemic period.

While the older-person patient outcomes of the different hospitals differed slightly by age group and patient health insurance coverage, the overall mortality rate in older persons was not significantly different between and pre- and post-COVID-19 period.

#### Policy recommendations

- (1) National policy-makers at the ministry level should provide support to health facilities at all levels, including community health service providers, in various areas that are urgently needed in order to meet demand and comply with standards. There need to be standardized guidelines by the level of urgency, including the development of a telemedicine service system to be sustainable in the long run.
- (2) Hospitals with local emergency operations centers should be prepared for new, emerging infectious diseases. For example, there should be guidelines for operations according to the hospital's workforce situation, including a management plan for case investigation of outbreaks or new diseases. Facilities need to classify the risk level of personnel who may be exposed to infected clients, and prepare a quarantine area for personnel with exposure.
- (3) Hospitals should conduct follow-up and evaluation of measures to deal with the epidemic in both the short- and medium-term.
- (4) There is the need for a health service model to enable elderly patients to receive medium- and long-term care, which is augmented by remote medical services, with links to primary care/community volunteers, and Senior Citizens' clubs. This includes palliative care for terminally ill patients.



# Developing a model to promote acceptance of letters of intent for medical treatment in older Thai persons using the community as a base<sup>2</sup>

Jon Phajong-Pengjad, Panchan Thapankulsak, and Suchada Taweesit

Srisawarintira Institute of Nursing, Thai Red Cross Society

Year of the study: 2021

#### Source of funds for the study:

Health Systems Research Institute (HSRI)

## Objectives

To develop a model for promoting acceptance of living wills in Thai older persons, using the home community as a base.

# Research methodology

This research project was conducted in Phlapph-la Chai Subdistrict, U Thong District, Suphanburi Province. In the first phase, quantitative data were collected from a sample of 880 participants, divided into 360 older persons, 360 family members of older persons, 120 health personnel, 20 village health volunteers (VHV), and 20 community leaders. Qualitative data were collected by in-depth interviews with 20 older persons, and by focus group discussions (FGD) with 26 community leaders and VHV.

# Findings of the research

Attitudes toward end-stage illness and death: People want to have the power to make decisions about how they are treated near the end of their life. Most of the older persons in this study have entrusted this end-of-life care to their adult children. At the same time, the respondents feel it is still acceptable for the attending physician to make medical decisions on behalf of the patient.

Attitudes toward physician-assisted suicide (euthanasia): More than three out of five older persons agreed with the idea of an assisted death if the family sees that death is a good option so that the patient does not suffer unnecessarily from a terminal illness. They felt that there should be a law to support the decision of the health team to follow the wishes of the patient in this matter. Most of the older persons and family members were unaware of the concept of a "living will." Less than ten respondents had heard of the living will concept, but did not know the details. At the same time, health workers had a poor understanding of the living will and end-of-life palliative care.

Once the concept of a living will was explained to them, the older persons, family members, community leaders, and health personnel had positive attitudes about such a letter of intent. However, most did not think it was applicable to their situation. In other words, they felt it was too soon to be thinking about end-of-life preparations. While most health workers have a positive attitude about the living will concept, they want patients to make their own decisions about treatment if and when they already have a terminal illness.

#### Policy recommendations

- (1) Encourage people of all age groups to have the knowledge, understanding, and correct attitude about the letter of intent to treat late-stage illness by providing a manual and a sample of a written form with instructions for medical interventions in a way that the public can easily access and understand.
- (2) Train agents of change to have knowledge and skills to change people's negative bias toward the concept of a living will, and help show how such a letter of intent is written and the benefits of doing so before waiting until a person becomes terminally ill.
- (3) Encourage community leaders, VHV, and health service staff to provide services related to making a letter of intent that is linked to the same system.
- (4) Include the preparation of a living will by an older person and their relatives as one of the indicators for assessing the quality of clinical services at all levels.
- (5) The local administrative organization at the sub-district level should establish a database of people who have prepared a letter of intent regarding clinical intervention for end-stage illness, and submit that information to the local hospitals as a means of communicating the needs and wishes of older persons for the clinical and health personnel in the area.



Health literacy survey project on understanding COVID-19 disease, prevention behavior, and vaccination among people with diabetes, older persons, and people with visual impairment<sup>3</sup>

Chanuanthong Tanasugarn, Watchara Riewphaiboon, Nareemarn Neelapaijit, and Nattanari Emyong

Faculty of Public Health, Mahidol University

Year of the study: 2021

#### Source of funds for the study:

Health Systems Research Institute (HSRI)

## Objectives

To study the situation of health literacy about COVID-19 disease, prevention behavior, and being vaccinated for protection against COVID-19 among people with diabetes, older persons, and the visually impaired. To synthesize policy proposals that are suitable for dealing with the COVID-19 epidemic for people with diabetes, older persons, and the visually impaired.

### Research methodology

This study was conducted in COVID-19 pandemic "hot spots" such as Samut Sakorn, Nakorn Pathom, and Yala, and COVID-vulnerable areas such as Phitsanulok, Sukhothai, Surat Thani, Surin, and Nakhon Ratchasima. Data were collected by health officials and students who have been trained in data collection processes. This study used cluster sampling in the catchment area of purposively selected Tambon Health Promotion Hospitals (THPH). Participants included patients in the diabetes clinic and members of Senior Citizens' clubs which are linked with the THPH. The sample of the visually impaired was selected with cooperation from the Association for the Blind of Thailand and the Provincial Association Network. A total of 1,024 participants were recruited for the study, divided into 336 older persons, 329 diabetic patients, and 359 visually-impaired persons.

## Findings of the research

The level of knowledge about the prevention of COVID-19 of the three groups in the sample was 19.6%. Access, understanding, questioning, decision-making, and word-of-mouth communication about COVID-19 were at low levels, except for practicing standard COVID-19 prevention.

When comparing the three groups, it was found that the diabetic patients had the most access and the older persons had the least access to information on COVID-19. The percentage of the three sample groups who did not have access to information from any channel was 8.3%, and the older person group had the least access to information about COVID-19. Part of the explanation for this is the decrease in home visits to older persons who were confined to their homes during periods of elevated transmission of COVID-19. Respondents from all three groups said that their local VHV was the most commonly-used source for COVID-19 information, followed by family members, health personnel, doctors, friends, and neighbors.

People who can read and write and have good vision are more likely to have good health literacy.

#### Policy recommendations

- (1) Access to COVID-19 is still important. There is a need to increase access by using traditional media such as television, and radio, as well as expanding social networking channels and adding more digital networks.
- (2) There should be a system for disseminating new research findings to public health personnel and networks in the community and society on an ongoing basis. The information exchange must be interactive, with Q&A, and which encourages continuous monitoring.
- (3) There should be a unit, committee, and work plan that has an integrated system with clear information on COVID-19 prevention and vaccination.
- (4) The Ministry of Public Health, the Ministry of Labor, and the Ministry of Human Security and Social Development should give priority to building relationships, communicating, and taking care of vulnerable individuals, family members, communities, and network of friends to be aware of COVID-19 prevention and vaccination.
- (5) There must be a system for monitoring, surveying, and surveillance of people's behavior, information, fake news, myths, and misunderstandings, and applying the survey results to decision-making in government strategy improvements. The Ministry of the Digital Economy and Society, mass media, and provincial and regional executives should be more active in information dissemination on COVID-19 prevention and control.

# The use of digital technology by older persons and proposals for enhancing the competence of Thai older persons<sup>4</sup>

Panom Kleechaya

Faculty of Communication Arts, Chulalongkorn University

Year of the study: 2020

#### Source of funds for the study:

National Research Council of Thailand, through the administration of TGRI

## Objectives

To describe the factors of people, technology, and motivation for using digital information, including the status of access, use, and skill in using digital technology among Thai older persons. To synthesize policy proposals for improving the performance of older persons with digital technology.

#### Research methodology

This study used mixed methods of data collection. First, a survey was conducted with a sample of 1,400 people aged 50-70 years in Chiang Mai, Ubon Ratchathani, Nakhon Sawan, Rayong, Songkhla, Bangkok, and the surrounding provinces of Bangkok. Next, the researcher conducted in-depth interviews with 44 persons aged 60 years or older, and 20 persons aged 50-59 years from different regions across the country. Finally, the researcher conducted ten case studies of older persons who can use technology to build relationships, generate income, and produce community products.

#### Findings of the research

The internet has become part of the daily life of both older persons and those about to enter the older-person age. This study found that the sample respondents used the Internet 5 to 6 times a day, for 30 minutes to one hour each time, for an average of 2-3 hours per day. Users accessed social media such as LINE, Facebook and YouTube to engage in discussion with others and follow the news. There was less use of the Internet for browsing and posting, email, online shopping, or Internet banking.

This research also highlights the opportunity to use technology to improve the quality of life and stability in the life of older persons, both individual and in terms of community productivity. The research indicates that older persons need to use the Internet to earn income that will help them maintain a stable life in older age. This is especially important for those age 55-59 years who need to begin preparing now for older age. Notably, the Internet and social media provide a valuable link between older persons, their adult children, and grandchildren who can help older persons with filming clips and tutoring them about how to make the best use of information and create content that can generate income.

Barriers to using digital technology for older persons include vision problems, forgetfulness, the need for some English language, and concerns about the risks and hazards of going online. However, older persons want to learn more about modern communication platforms and need support for accessing high-speed Internet services. There is an urgent need for tutoring on how to use online media safely, and how to create a webpage to sell community products or content online.

#### Policy recommendations

Recommendations for the development of competence in the digital society include preparing older persons to be able to apply information technology in their daily lives, and enhance their quality of life. What is more, many older persons can earn supplemental income by marketing individual and community products. Regarding policy, the two main recommendations based on the findings of this research are (1) Welfare policy guidelines for the use of information technology; and (2) Quality of life in the 5G society for older persons, and ensuring the security of online use for older persons.

In addition, the author proposes a paradigm shift from "Active and productive aging" toward "Active older persons" with a mechanism for transferring policies to relevant government agencies to be considered in conjunction and integrated with the current strategic plans. There need to be better mechanisms of cooperation between organizations and the government, private businesses, and especially companies that operate high-speed Internet services, mobile phones, and digital media. There needs to be a mechanism to establish and promote investment as a social enterprise by integrating agencies, plans, projects and activities to promote innovation development and technological inventions for the quality of life

for older persons. There needs to be an operating mechanism that focuses on the connection between multiple generations, a mechanism to promote research and development innovations, a research framework for the development of the quality of life and stability of older persons in a digital society, and public communication mechanisms to create a framework for media advocacy on behalf of Thai older persons.



#### References

- 1 Pattara Leelawarong, et al (2021). Study of the impact of COVID-19 on older people's access to health services in Thailand. Bangkok: HITAP
- 2 Johnphajong Phengjad, Panchan Thapankulsak, and Suchada Taweesit. (2021). *Development of a community-based model of promoting the living will acceptance among Thai elderly.* Bangkok: Srisavarindhira Thai Red Cross Institute of Nursing
- 3 Chanuantong Tanasugarn, Watchara Riewphaiboon, Nareemarn Neelapaijit, and Natnaree Aimyong. (2021). Covid-19 self protective behavior and vaccine health literacy survey among diabetes patients, elderly and the blind. Bangkok: Faculty of Public Health, Mahidol University.
- 4 Phnom Kleechaya. (2020). *Digital technology utilization of elderly and framework for promoting Thai active and productive aging.* Bangkok: Faculty of Communication Arts, Chulalongkorn University.

# References

#### Thai

- Chanuantong Tanasugarn, Watchara Riewphaiboon, Nareemarn Neelapaijit, and Natnaree Aimyong. (2021). *Covid-19 self protective behavior and vaccine health literacy survey among diabetes patients, elderly and the blind.*Bangkok: Faculty of Public Health, Mahidol University.
- Department of Mental Health, Ministry of Public Health. (2019). *Information on mental health assessment of Thai people: Mental Health Check-In.* Retrieved from: https://checkin.dmh.go.th/dashboard/index.php.
- Institute for Population and Social Research. Mahidol University. (2021). *Mahidol Population Gazette 2021*. Nakhon Pathom: IPSR, Mahidol University, Retrieved from: https://ipsr.mahidol.ac.th/ipsrbeta/th/Gazette.aspx
- \_\_\_\_\_. (2022). Glossary of Terms in Population and Social Research. Retrieved from: http://www.popterms.mahidol.ac.th/
- Johnphajong Phengjad, Panchan Thapankulsak, and Suchada Taweesit. (2021). *Development of a community-based model of promoting the living will acceptance among Thai elderly.* Bangkok: Srisavarindhira Thai Red Cross Institute of Nursing
- National Statistical Office. (no date). 1970 Population and Housing Census. Bangkok: National Statistical Office.
- . (no date). 1990 Population and Housing Census. Bangkok: National Statistical Office.
- . (2021). Public opinion survey on the situation of the COVID-19 epidemic, 2021. Retrieved from: http://www.nso.go.th/sites/2014/DocLib12/2564 /report Vaccine.pdf.
- \_\_\_\_\_. (2022). The 2021 Household Survey on the Use of Information and Communication Technology (Quarter 4). Bangkok: National Statistical Office.
- \_\_\_\_\_. (2022). A survey of people's opinions on government assistance and remedy measures from the COVID-19 situation, 2021. Retrieved from: http://www.nso.go.th/sites/2014/DocLib12/2564/080664\_13.pdf.
- \_\_\_\_\_. (2022). Executive Summary, The 2021 Survey of the Older Persons in Thailand. Bangkok: National Statistical Office.
- Office of the National Economic and Social Development Council. (2019). Report of the Population projections for Thailand 2010-2040 (Revised Edition). Bangkok: Office of the National Economic and Social Development Council.
- Pattara Leelawarong, Peerawat Jinathongthai, Sutharn Chantawong, Yuthana Wongsalap, Kirati Kengkla, Araya Yanphiboon,...Nithijan Kitti, Ratkul Araya. (2019). *Impact of coronavirus disease 2019 (COVID-19) pandemic on access to healthcare services of elderly in Thailand*. Bangkok: HITAP.
- Phnom Kleechaya. (2020). Digital technology utilization of elderly and framework for promoting Thai active and productive aging. Bangkok: Faculty of Communication Arts, Chulalongkorn University.
- Phnom Kleechaya. (2022). Digital Technology Utilization of Elderly and Framework for Promoting Thai Active and Productive Aging. *Journal of Communication Arts*, 39:2, 56–78.
- Pramote Prasartkul, Sutthida Chuanwan and Pimonpan Isarabhakdi. (2018). Research report titled "Optimum Population for Thailand. Nakhon Pathom: Institute for Population and Social Research, Mahidol University.

- Sutthida Chuanwan and Pramote Prasartkul. (2020). The optimum size of population for Thailand. *Journal of Demography.* 36 (1), 1-16.
- The Older Persons Act B.E. 2546 (2003, 31 December). National Gazette. Volume 120, chapter 130 A, pages 1-8.
- The Royal Academy. (2014). Dictionary of demographic terms. First Edition, Bangkok: The Royal Institute.
- The Bureau of Registration Administration, Department of Provincial Administration. (2020). *Official statistics registration systems*. Retrieved from: https://stat.bora.dopa.go.th/stat/statnew/statyear/#/

#### English

- Ritchie, H., et al. (2020). Coronavirus Pandemic (COVID-19). OurWorldInData.org.
- Schlomann, A., et al. (2020). Assistive technology and mobile ICT usage among oldest-old cohorts: comparison of the oldest-old in private homes and in long-term care facilities. Research on Aging, 42(5-6): p. 163-173.
- Seifert, A., S.R. Cotten, and B. Xie. (2021). A Double Burden of Exclusion? Digital and Social Exclusion of Older Adults in Times of COVID-19. *The Journals of Gerontology:* Series B, 76(3): p. e99-e103.
- Sepúlveda-Loyola, W., et al.. (2020). Impact of Social Isolation Due to COVID-19 on Health in Older People: Mental and Physical Effects and Recommendations. *J Nutr Health Aging*, 24(9): p. 938-947.
- Vogels, E.A.. (2020). From virtual parties to ordering food, how Americans are using the internet during COVID-19. Retrieved May, 10: p. 2020.
- Xie, B., et al. (2020). When going digital becomes a necessity: Ensuring older adults' needs for information, services, and social inclusion during COVID-19. *Journal of Aging & Social Policy*, 32(4-5): p. 460-470.
- United Nations. (2019). World Population Prospect: The 2019 Revision. Retrieved from: https://population.un.org/wpp/Download/Standard/Population/
- United Nations. (2021). *International Day of Older Persons: United Nations*; Retrieved from: https://www.un.org/en/observances/older-persons-day



# Working group of the situation of the Thai older persons 2021

Dr. Somsak Chunharas, M.D.	Foundation of Thai Gerontology Research and Development Institute
Dr. Phusit Prakongsai, M.D.	Foundation of Thai Gerontology Research and Development Institute
Ms. Siriwan Arunthipphaitoon	Foundation of Thai Gerontology Research and Development Institute
Dr. Ladda Damrikanlert, M.D.	Foundation of Thai Gerontology Research and Development Institute
Prof. Emeritus Dr. Pramote Prasartkul	Institute for Population and Social Research, Mahidol University
Prof. Sasipat Yodphet	Distinguished Member of the National Committee on Older Persons
Prof. Dr. Wichai Ekplakorn, M.D.	Faculty of Medicine, Ramathibodi Hospital, Mahidol University
Dr. Samrit Srithamrongsawat, M.D.	Faculty of Medicine, Ramathibodi Hospital, Mahidol University
Assoc. Prof. Dr. Wiraporn Phothisiri	College of Population Studies, Chulalongkorn University
Mrs. Thida Sripaiphan	Senior Citizens Council Association of Thailand
Mrs. Ubon Limsakul	Senior Fund Management Committee Member
Permanent Secretary or representative	Office of the Permanent Secretary, Ministry of Labor
Permanent Secretary or representative	Office of the Permanent Secretary, Ministry of Transport
Permanent Secretary or representative	Ministry of Digital Economy and Society
Director-General or representative	Department of Older Persons
Director-General or representative	Department of Promotion and Development of the Quality of Life of Persons with Disabilities
Director-General or representative	Department of Local Administrative
Director-General or representative	Rights and Liberties Protection Department
Director-General or representative	Department of Cultural Promotion
Mrs. Sirilak Meemark	Expert on Older Persons, Department of Older Persons
Director or representative	National Statistical Office
Director or representative	Division of Strategy and Plan, Department of Older Persons
Director-General or representative	Department of Disease Control
Director-General or representative	Department of Mental Health

Director-General or representative	Department of Medical Sciences
Director or representative	Institute of Geriatric Medicine, Department of Medical Services
Director or representative	Bureau of Elderly Health, Department of Health
Director or representative	Primary Health Care Division, Department of Health Service Support
Secretary-General or representative	National Health Security Office
Director or representative	Fiscal Policy Office
Director or representative	Center for non-formal and informal education, special target groups, Office for the Promotion of Non-Formal Education
Director or representative	Department of Social Development, BMA
Director or representative	Office of Health Support for Specific Populations, Thai Health Promotion Foundation
Director or representative	Health Department, BMA
Director or representative	Older Persons Fund
Secretary-General or representative	Social Security Office
Secretary-General or representative	National Savings Fund
Association president or representative	Thai Society of Gerontology and Geriatric Medicine
Mr. Apichart Thanyahan	National Statistical Office
Mrs. Suthikan Chunsuthiwat	National Health Foundation
Assoc. Prof. Dr. Jongjit Rittirong	Institute for Population and Social Research, Mahidol University
Assoc. Prof. Dr. Sutthida Chuanwan	Institute for Population and Social Research, Mahidol University
Lecturer Dr. Napaphat Satchanawakul	Institute for Population and Social Research, Mahidol University
Ms. Suporn Jaratsit	Institute for Population and Social Research, Mahidol University
Ms. Kanchana Thianlai	Institute for Population and Social Research, Mahidol University
Ms. Bongkoch Chudatemiya	Foundation of Thai Gerontology Research and Development Institute
Ms. Anussara Anukroh	Foundation of Thai Gerontology Research and Development Institute
Ms. Phatarawadee Karat	Foundation of Thai Gerontology Research and Development Institute
Ms. Witchuta Isranuwat	Foundation of Thai Gerontology Research and Development Institute



"Lamduan" flower symbol of the older person

Source: pinterest 119

#### Situation of the Thai Older Persons 2021

ISBN 978-616-443-736-4

#### National Library of Thailand Cataloging in Publication Data

Foundation of Thai Gerontology Research and Development Institute (TGRI). Situation of the Thai Older Persons 2021.--Nakhon Pathom: Institute for Population and Social Research, Mahidol University, 2022. 120 p.

1. Older people. 2. Older people - Government policy.

I. Anthony Bennett, tr. II. Porta Boonyatearana, ill. III. Title.

305.26

#### Advisors

Banloo Siriphanich, M.D. Somsak Chunharus, M.D

#### Chief Editor

Emeritus Prof. Dr. Pramote Prasartkul

#### Editors

Phusit Prakongsai, M.D. Ladda Damrikarnlerd, M.D. Siriwan Aruntippaitun

Associate Professor Dr. Wiraporn Pothisiri

Director of the Strategic and Planning Division, the Department of Older Persons

Director of the National Statistical Office

Director of Academic Administration, Older Persons Fund

Director of Institue of Geriatric Medicine

Department of Local Administration, Ministry of Interior

Associate Professor Dr. Jongjit Rittirong Associate Professor Dr. Sutthida Chuanwan Lecturer Dr. Napaphat Satchanawakul

Suporn Jaratsit Kanchana Thianlai Bongkoch Chudatemiya Anussara Anukroh

Phatrawadee Karat Witchuta Isranuwat

First printing: September, 2022

Number of copies: 300

With financial support from the National Commission for Senior Citizens, Older Persons Fund

#### Published by:

Institute for Population and Social Research, Mahidol University
Foundation of Thai Gerontology Research and Development institute (TGRI)

Artistic design: Porta Boonyatearana Translator by: Anthony Bennett

#### Printed at:

Amarin Printing and Publishing Public Company Limited 378 Chaiyapruek Road, Taling Chan Sub-district, Taling Chan District, Bangkok 10170 Tel. 0-2882-1010 Fax 0-2434-1385

#### Suggested citation:

Foundation of Thai Gerontology Research and Development institute (TGRI). (2021). Situation of the Thai Older Persons 2021. Nakhon Pathom: Institute for Population and Social Research, Mahidol University.



"I am very careful with the food I eat.

We must eat the right food.

The focus should be less on meat and more on vegetables and fruit.

One must exercise regularly, and practice calming the mind.

Most importantly, one must take care of one's health to the best extent possible.

One should not invite problems into one's life, and be self-reliant for as long as possible."

CHEK THANASIRI, M.D.

National Older Person for 2021



# Digital fairness for people of all ages

To ensure that older adults have access to technology and participate equally in the digital world

Slogan for International Day of Older Persons 2021











Phahon Yothin 22, Chom Phon, Chatuchak, Bangkok 10900 Tel +66-2511-4963 Fax +66-2511-4962 www.thaitgri.org

# Institute for Population and Social Research Mahidol University

999 Phutthamonthon 4 Road Phutthamonthon, Nakhon Pathom, Thailand 73170 Tel +66-2-441-0201-4 Fax +66-2-441-9333 www.ipsr.mahidol.ac.th