

## The Model of Holistic Development of the Elderly's Quality of Life through Sustainable Participation Process: A Case Study of Tha Takiab District, Chacheongsao Province, Thailand

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**Abstract:** This participatory action research was conducted with mixed method. The research was done with Plan-Do-Check-Action process. The research objectives were to create a model of the holistic development of the elderly's quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, Thailand. The key informants of this research consisted of elderly, families, government officers, community leaders, and local leaders. Derived from purposive sampling appropriately compatible with the research, 50 key informants were selected through snowball technique. The data collection was done through focus group. The population of quantitative research were 85 elderly living in Moo 2 of Tha Kan Sub-district, Tha Takiab District, Chachoengsao Province. The sample of 70 people was determined with Krejcie & Morgan table at the reliability level of 95%, using simple random sampling. The statistics used for quantitative data analysis was percentage, means, standard deviation, and ANOVA. The content analysis was used with qualitative data. The research results found that the model of promoting holistic quality of life through participation process for sustainability of the elderly or the warm house model (HESS Model) consisted of 4 dimensions as follows: H: Health refers to the dimension of good physical and mental health of the elderly. The elderly must have knowledge of self-care and be able to take care of themselves, as appropriate for each individual's E: Economic means the elderly who were responsible for their self-reliant. They should work according to their physical condition and spend economically. S: Safety means good surroundings with safety for the elderly, both inside and outside their home, including elderly toilets, travel, roads, various places in the community and fitness centers. S: Social Support means good support from society, such as establishing a network of elderly people in their own communities and develop guidelines in mutual caring for older people.

**Keywords:** Participatory action research, Quality of life, Elderly, Sustainability, Thailand

### 1. Introduction

Apparently, our world had been changing in terms of economy, society, science and technology. Moreover, the medical development caused people became long-lived. It also resulted in a continuous change of population structure in each country. Incidentally, the United Nations had defined "Aging Society" as on in which a continuously increasing tendency of the sixty-year-old people over six. "Aged Society" was a society in which more than of 10 per cent of population of 60 years or older. Also, it might be a society in which more than 7 per cent of total population was 65 years or older. "Completely Aged Society" meant a society in which more than of 20 per cent of population of 60 years or older. Also, it might be a society in which more than 14 per cent of total population was 65 years or older. "Super-Aged Society" meant a society in which more than of 28 per cent of population of 60 years or older. Also, it might be a society in which more than 20 per cent of total population was 65 years or older. According to the aforementioned definitions, it was apparent that Thailand was the aged society because the total population of elderly in Thailand was 17.1 percent. It was reaching to the completely aged society. It was estimated that one if third of total population in Thailand during 2021-2040. By this, Thailand would be classified as the super-aged society) [1]

The main problem condition of Thai elderly was a health problem. It resulted from the physical deterioration of organs due to agedness and the chronically contagious diseases due to long-term unhealthy behavior such as muscle pain, osteoarticular diseases, high blood pressure, dyslipidemia, diabetes, etc. The elderly's health problem also resulted from the lack of an appropriating understanding and misunderstanding in taking medicine of the elderly and those who took care them. Moreover, the elderly could not conveniently access medical service because they had no any relatives to guide or accompany. [2] Incidentally, the elderly's health problem still originated from inappropriate surrounding for their living. An increasing number of the elderly occurred with a decreasing number of people in labor age which had played a pivotal part in taking care of the elderly in their own family.

According to the aforementioned situation of population structure, the Thai government placed an importance on the development of people's quality of life and providing various kinds of public services in order to facilitate the elderly to have potential and be able to take care of themselves as it had been appeared in the Constitution of Thailand B.E. 2550, Section 53. It decreed that "A person who is over sixty years of age and has insufficient income

for living shall have the right to welfare, public facilities and appropriate aids from State". By this, it could be seen that Thai government allotted subsistence allowance for all the elderly according to their right when they were 60 years or older. The subsistence allowance was allotted in the age-staircase patten, namely the 60-69 year-old-elderly would be allotted for 600 baht per month. The 70-79 year-old-elderly would be allotted for 700 baht per month. The 80-89 year-old-elderly would be allotted for 800 baht per month, and the 90 year-old-elderly and the older would be allotted for 1,000 baht per month.

Moreover, the main responsibility in taking care of the elderly's quality of life in Thailand belonged to the community government officers. Those who worked on behalf of Ministry of Interior would be responsible for the relieving-suffering-and-enriching-happiness mission, those who worked on behalf of Ministry of Public Health would be responsible for the public health mission, those who worked on behalf of Ministry of Social Development and Human Security would be responsible for social development and welfare. Therefore, the Thai government had the measure to take care the elderly through the national elderly planning (No. 2) (B.E. 2545-2564)[3] The measure emphasized a cooperation among four sectors namely 1) people, 2) family, 3) community, and 4) society and government. By this, all the sectors were assigned to take care of the elderly. Currently, Thailand had four models for taking care of elderly, namely 1) in-family care, 2) in-institution care, 3) care in special-situation, and 4) care with community-participation. For the care with community-participation, it was a model in which a consciousness-supporting strategy had been used to arouse people in the community to participate in problem solving and brainstorming, as well as mobilizing the cooperation and service development for the elderly in the community. Additionally, the community potential support on problem solving in the community by community members was another strategy to sustainably strengthen community.[2]

A sustainable care of the elderly was aimed to facilitate them to better quality of life and to enable them to take care of themselves appropriately in accordance with individuals' factors and related people's participation. Incidentally, the individual consideration of elderly's holisticness consisted of body, mind, emotion, society, and spirit. As a result, these elements were inseparably related [4]. The development of the better quality of life should be considered about individuals' identity, beliefs, living, and specific environment. Then, the model of development which designed to virtually respond the elderly's needs would push the development to successfully and sustainably achieved. Obviously, the development should be of people's need. This statement was in accordance with [5]. They mentioned that it was insufficient to only take care of the elderly in a circle of public health, but it needed a cooperation of the network of sectors operating on the elderly care. Additionally, it also needed integrated teamwork. By this, it would be considered as a satisfying dimension of the care of the elderly. In order to secure an efficient system to serve the impending problems of the elderly in the future like building up networks of Ministry of Public Health, Ministry of Social Development and Human Security, Ministry of Education, Ministry of Interior, and Ministry of Finance. Significantly, it must be simultaneously integrated with physical health, mind, and society. This is in accordance with [6]. It was mentioned that there were many factors to facilitate to sustainably and successfully secure a health support. The most significant factor was participation of the target, namely the people joined hand in hand to brainstorm, operate, and assess the health activity. The people could determine their needs and necessity by themselves as well as adjust appropriately how to solve the problems. Therefore, it was believed to be a better way to sustainably solve the problems than the problem solving done by the government sectors which had emphasized on the only-help-providing approach. As a result, the people could take care of themselves and their quality of life appropriately and independently.

[7] mentioned that the quality of life was wellbeing of oneself—in both physically and mentally—and society. By this, its definition covered security, right, and freedom. The development of the quality of life was a process facilitating to develop potentials of individuals and communities in order to accelerate their potential to improve their own lives and others [8]. The holistic development of quality of life meant an improvement of the quality of life in order to build up a balance of body, mind, emotion, society, surrounding, and spirit. The development was done through a consideration of all the elements in people and surrounding around the people. In this case, individuals had participated to take care of their quality of life. At the same time, they would be satisfied to what they had done, causing a change of their way of life. It was in accordance with [9]. It was found that the elderly became satisfied to join the activities which could be responded the four dimensions of quality of life: body, mind, society, wisdom and learning; it was better than any activities in which the holistic strategies had not been integrated. Moreover, the quality of life also was an index Thailand's standard indicating people's wellbeing and could be traced and evaluated. It could guideline people's way of life. By this, if people of any country had a better quality of life, their country would be developed faster than that of a worse quality of life [10].

Chachoengsao province was one of provinces in which the provincial governor had place an importance for lifting up people's quality of life and solving of poverty problem for people's wellbeing. In this case, the governor of Chachoengsao had eagerly supported the program called "the Princess Mother's Medical Volunteer Foundation

of Chachoengsao province” and the program called “Chachoengsao Province for Relieving Suffering and Enriching Happiness for People’s Smiles” in the fiscal year of 2018. By this, the provincial governor of Chachoengsao had assigned the government and private sectors to participate to solve people’s problems. Incidentally, as the only one university of Chachoengsao Province, Rajabhat Rajanagarindra University aimed to develop the local people of Chachoengsao Province through the elimination of their poverty. In this case, Rajabhat Rajanagarindra University had done a field trip to survey people’s problem in order to gain the necessary information for solving people’s problem appropriately [11].

Tha Takiab District was one of 11 districts of Chachoengsao province. It is 84 kilometers away from the city center, it was located at the east of the city of Chachoengsao. Tha Takiab District consisted of two sub-districts, 47 villages, 8,375 households, and 33,993 population. There were 2,319 elderly; it was 7 per cent of total population [12]. After the survey had been done, it was found that most of elderly encountering the problem of poverty and lack of understanding on taking care and supporting their health for better quality of life. Therefore, when they were ill, they would rely on local herb medication from the, local, traditional doctors, rather than the doctors in the modern hospitals [11]. It was in accordance with the results shown by the survey on Thai people’s quality of life in 2017, appearing in criteria of basic necessity of 2017 in a section of health. By this, it was found that the first four ranking which were under the criteria of Chachoengsao Province were 1) people over 35 had not had an annual medical check-up, 2) households had consumed unhygienic, unsafe, and low-standard food, 3) people over 6 had lacked an regular exercise—three days per a week; 30 minutes per days, and 4) household had had an inappropriate medication. [10]

According to the aforementioned information, it was found that some elderly in Tha Takiab District, Chachoengsao Province still had had a lack of the development guideline for quality of life through participation process for sustainability. By this, the researcher was interested in studying the condition of holistic development context on quality of life among the elderly in Tha Takiab District, Chachoengsao Province. Moreover, the researcher also tried out and evaluate the model through the participation of all sectors in the community namely elderly, families, community leaders, government officers and relevant social networks. Incidentally, the gained information would be a development for Tha Takiab District as a development guideline for strategical policy plan of quality of life for the elderly who were virtually related to the social need and problems. Simultaneously, Rajabhat Rajanagarindra University, particularly Public Health Program would gain a guideline for establish a curriculum in public health program in accordance with area context. Moreover, it still facilitated the students to learn how to conduct research in community with research team. Obviously, it was a participative system management towards people’s holistic development of quality of life. By this, the related government and private sectors were integrated to support efficiently the elderly’s health and local people of Chachoengsao.

## 2. Research Objectives

The objective of this study was to create a model of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, Thailand.

## 3. Reserch Methodology

### 3.1 Research Design

This participatory action research was designed to use local people in the community and related people to participate to conduct research by themselves. By this, the research would be an advisor and consultant in order that the research process could be conducted in accordance with research methodology. This research was comprised of qualitative research and quantitative one. The research process was done with the PDCA (Plan-Do-Check-Action) process or Deming Cycle—it was a quality work management circle. It consisted of “P” (Plan): it meant a planning process to select research problem and to set the goal. It also included solving the problem and planning to solve the problem. “D” (Doing): it was a process on solving the problems as it had been planned. “C” (Check): it was a process of checking and comparing the results. “A” (Action): it was determining standard and improving [13].

### 3.2 Key Informants and Population

Qualitative Research: For the part of qualitative research, it was used through documentary study in both Thai and English books. In-depth interview and focus group were used for this part.

Key informants were elderly, family, government officers, community leaders, and local leaders in Tha Takiab District, Chachoengsao Province.

Derived from purposive sampling, the key informants for focus group and in-depth interview were selected from people most relevant to the objectives of the research, namely, they were related to taking care and developing of

the elderly's quality of life through snowball technique. 50 key informants were comprised of 20 elderly, 10 members from the elderly's family, 14 government officers and volunteers whose work related to public health affairs, 4 community leaders, and 2 local leaders. And

**Quantitative Research:** For the part of quantitative research, it was conducted with survey research through questionnaire which had been designed from the results of qualitative research and the theory on quality of life as research instrument for collecting data after the problem-solving process was done.

Population used for research were 85 elderly living at Moo 2, Tha Khan Sub-district, Tha Takiab District, Chachoengsao Province.

The determination of the sample size was calculated by the [14] sample size table. The confidence level was determined at 95%; its size was equivalent to 70 samples.

Derived from multi stage sampling, the samples were selected from only one village in Tha Takiab Subdistrict, Tha Takiab District. It was Moo 2, Tha Takiab Sub-district, Tha Takiab District, Chachoengsao Province. For the last step, it was done with simple sampling to select 70 elderly.

### 3.3 Research Tool

**For the qualitative research:** its data was collected by focus group for survey of problems and planning for solving problems. Also, in-depth interview was used for collecting data; it was done with semi-structured questionnaire focused on a present condition, problems and guidelines for solving problems and improving the elderly's holistic quality of life for sustainability among the elderly in Tha Takiab District, Chachoengsao Province.

For Rigor criteria, the researcher checked through data triangulation like annual report, newspaper, analysis of related documents etc. By this, reflexive note was applied after collecting data in order that the concepts, beliefs on data, and links would be recorded as well as be completely and correctly analyzed.

**For quantitative research:** its data was collected by questionnaire on the holistic quality of life with participatory process for elderly's sustainability in Tha Takiab District, Chachoengsao Province. There were 70 questionnaires; it was equivalent to 100%. The period of data collecting was during March – October 2018.

### 3.4. Data Analysis

For the qualitative analysis, it was done through data coding and interpretation as well as creating paradigm in which the theory and conducted researches had been compared with content analysis. Moreover, Atlas Ti 7.1 was applied to help for system management of data analysis. The data analysis was classified into three stages according to [15]. There were as followed:

1. Open coding: It was a process on determining code or index [16] form data from interview. It was an analysis to seek a consistency of kind or group of data from interview. By this, the researcher opened the code line by line. In case of the model of holistic development of elderly's quality of life was found, the researcher would determine the code.

2. Axial coding: it was a process on coding through combining kinds of data and properties. By this, it was building up a relation of data in each code.

3. Select coding: it was a selection of events which were an important key for summarizing what had been found from decoding and interview. This stage was to summarize kinds, relation or theme of data in order to seek relation or phenomena of the model of holistic development of elderly's quality of life.

The stages of quantitative data analysis were as follow:

1. To classify the responded questionnaire following the qualification of respondents.
2. To code the responded questionnaire in each question and then record in computer through computer package.
3. To analyze data in accordance with research objectives the analysis of statistics, mean, and percentage.

## 4. Research Results

They were presented according to the objectives of research as follows:

The first objective: For the study the present conditions and problems of the elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, it was conducted in accordance with the PDCA process as follows:

1. For the first step “P” or “plan”, it was a stage of planning. This step was done through focus group in order to make a survey problems and guidelines for solving problems concerning the elderly in Tha Takiab District, Chachoengsao Province. The focus group consisted of 50 people: elderly representatives, community leader and family. According to the focus group, many problems were found in many aspects. They were 1) economic problem: it was the need to gain more income among the elderly and their family, 2) environmental problem: it was about the inconvenient and uneven roads in the village. The roads were non-asphalted road. By this, they wanted the gravel or asphalted roads, 3) social problem: it was about the lack of suitable places attracting the elderly to join for their activities. There had been no the elderly club. By this, the elderly wanted to conveniently gather for activities as well as wished their family to take care of them without leaving them into oblivion, and 4) physical problem: it was the elderly’s illness with chronic diseases like high-blood pressure, diabetics etc.

Incidentally, in order to secure the complete information in all dimension, the researcher had made an in-depth interview for 50 elderly and community leaders. Concerning their need of development of quality of life, it was in accordance with the information reflecting from focus group i.e. increasing income and more care from their own family. Some key informants said that “(I) want to gain more money. The financial support from the government is not sufficient for each month.” Also, it was in accordance with another elderly said that “I am now alone, I want my offspring to take care of me”.

After the problems were known, the brainstorming for solving problems was conducted. Initially, the two activities were suggested to solved the problems. They were 1) an activity to solve the economic problem: By this, the workshop on making Dok Mai Chan, a kind of Thai traditional wood flower used to be placed on the site of cremation, was suggested. It would be expected to increase income among the elderly and their own family, and 2) an activity to solve the social problem: the petanque court was proposed to be a platform for meeting among the elderly, family and all villagers.

Then, the focus group participated to plan for solving problem. By this, the operation was as follows: 1) to establish a specific committee to push forward the activity. The committee consisted of 12 volunteered elderly who would be assigned to contact with trainers for making Dok Mai Chan as well as to specify the date and inform the group members, and 2) to raise fund for making the petanque court. This activity was done because this program had not been appeared in the budget plan.

2. For the second step “D” or “doing”, it was a stage of doing following the plan determined in the first stage. They were as follows: 1) For economic aspect: the responsible team contacted then trainers from Woman’s Council of Phanom Sarakham District for the workshop activity of making Dok Mai Chan as shown in Figure 1 below.



**Fig. 1** Trainer was demonstrating how to make *Dok Mai Chan*

2) For the social activity: the responsible team asked for donation from local people in the community and researcher network in order to secure a budget for making the petanque court near the village hall. The budget of 20,000 baht was donated. The petanque court was built in accordance with the determined size and area as it was shown in Figure 2.



**Fig. 2** Petanque Court.

3. For the third step “C” or “checking”, it was a stage of checking whether the plan successfully achieved after it had been in practicum in the process of doing.

After following up and assessing the economic results through observation and interview of those who had joined the program of making Dok Mai Chan, it was found that the program attendants had insufficient skills to make the perfect Dok Mai Chan. Moreover, they still had the problem concerning a lack of marketing information for increasing incomes.

For the problems and obstacle, it was found that making the perfect Dok Mai Chan required for high skill; it was higher than the elderly’s capability since their hand muscle was not strong. Also, their visual ability was not efficient. Therefore, all of them were unable to make Dok Mai Chan.

One of key informants stated that “our product must be made in satisfied quality. We want the trainers teach us again for skillfulness. We still have no a professional to make it and pass on to the others.

4. For the fourth step “A” or “action”, it was a stage of improving.

After following up and assessing the economic results, it was obviously found that to develop the skill for making Dok Mai Chan was very difficult and risky for the elderly since they had had problems of hand muscle and visual deficiency due to its complicated and difficult process from binding and tightening the small wires. By this. The responsible team collaborated to find the solution. They summarized that they would invite the trainers to teach again as well as appoint the trainers for workshop on January 8<sup>th</sup> 2019. Incidentally, one of key informants mentioned that “they appointed to teach us again on January 8<sup>th</sup>, 2019. We enrolled already and hope to practice in order that we can pass on to others.”

After the workshop had been organized again, the attendants could make *Dok Mai Chan* with more skillfulness. Additionally, they established the specific group for selling and increasing incomes for their members. For marketing promotion, it was done under the guidance of the trainer team. Importantly, the Woman Council of Phanom Sarakham District was established. When Dok Mai Chan had been made skillfully, the trainer team bought Dok Mai Chan on behalf of the Woman Council of Phanom Sarakham District.

For following up and accessing in social aspect through meeting and playing petanque, it was found that the general people and the elderly played petanque on the day in when the meeting has been held. It was considered as a good event in which people had mutually participated the activities. One of key informants mentioned that “it is very good for having the petanque court. People have more times to meet each other and enjoy. We can do something more than only meeting and talking about work.”

In summary, for the development on the quality of life through participatory action from all sectors in this qualitative research enabled us to know the importance of the economic and social dimensions. It was done in accordance with the group member’s opinion which these problems were put priority for seeking the guideline of problem solving. In this case, the researcher used this issue as a major element for creating the development model of the elderly’s quality of life in Tha Takiab District, Chachoengsao Province. However, the group members still place an importance on other elements as well.

For the second objective: It was to create a model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province.

According to the mentioned data of qualitative research, the researcher had initially drafted the model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province. The researcher compared with the various integrated knowledges of quality of life. They were the concept regarding four dimensions of the quality of life indicated by the World Health Organization. They consisted of body, mind, social relativity, and environment. Incidentally, the concept of holistic health care and that of community participation were comprised of four dimensions: economy, society, health, and community participation. They were holistically integrated and regarded qualitative data. In order to gain the complete data before making the suitable model with both qualitative and quantitative data, the researcher had made a survey of the elderly’s opinion on the quality of life as quantitative data after they had joined the activity. According to the data from interview through questionnaire on the elderly quality of life in Tha Takiab District, Chachoengsao Province, it revealed as follow:

For the first part: For the general information of the elderly who were key informants, they were female; it was 80 per cent. Their age was between 60-70 years; it was 70 per cent. Most of them were with their spouse, it was 70 per cent. Their income was not sufficient; it was 75 per cent. They were ill with chronic diseases; it was 82 per cent.

For the second part: It was information about the opinion on the participation of community leaders concerning the elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province as it shown below:

**Table 1:** Mean and standard deviation of community leaders’ participation toward the elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province in both overall and each aspect.

Participation of Community leaders	Level of opinion			
	$\bar{X}$	S.D.	Meaning	level
Planning	3.41	.048	Moderate	3
Operating as planned	3.37	0.48	Moderate	4
Following up and evaluating	3.43	0.49	Moderate	2
Improving	3.47	1.28	Moderate	1
Total	3.42	0.75	Moderate	

According to the Table 1, it was found that the overall level of the community leaders’ participation on the develop of elderly’s quality of life in Tha Takiab District Chachoengsao Province. For the overall opinion of the elderly in Moo 2, Tha Khan Village, it was at a moderate level ( $\bar{X} = 3.42$ ). When considered in each aspect, it was found that that of the highest average was improving ( $\bar{X} = 3.47$ ), following up and evaluating ( $\bar{X} = 3.43$ ), planning ( $\bar{X} = 3.41$ ), and operating as planned ( $\bar{X} = 3.37$ ).

**Table 2:** Average and standard deviation of the elderly’s quality of life in Tha Takiab District, Chachoengsao Province in both overall and each aspect

The elderly’s quality of life	Level of Opinion			
	$\bar{X}$	S.D.	Level	Ranking
Body	2.87	0.60	Moderate	4
Mind	2.93	0.59	Moderate	3
Social relation	3.14	0.44	Moderate	2
Surrounding	3.31	0.52	Moderate	1
Average	3.06	0.54	Moderate	

According to the Table 2: For the overall level of the elderly's quality of life in Moo 2, Tha Khan Village, Tha Takiab District, Chachoengsao province, it was at the moderate level. It was found that the aspect with the highest average was that of environment. The aspects of social relation, mind, and body were less respectively.

According to the summary of evaluating and improving the development of the elderly's quality of life in both qualitative and quantitative data, the researcher created the model and an experiment of elderly holistic development of quality of life through sustainable participation process: a case study of Tha Takiab District, Chachoengsao Province. By this, the focus group activity was held with the guidance of the specialists to assent and affirm the elements of the model of development of quality of life of the elderly. The elements consisted of dimensions like health, economy, safety and social support. Incidentally, the focus group meeting unanimously consented to these elements as the suitable ones. Moreover, they suggested that there should be a continuing development by the establishment of the elderly club in order to create a network for the elderly's development because there was no the elderly club in the village. Then, the research proposed the model on the quality of life or HESS Model as the warm house for the elderly. By this, the researcher put the overall elements in dimensions in balance like health, economy, safety, and social support. It was a model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province. Incidentally, the proposal was asked for the opinion from the meeting afresh. Eventually, it resulted in a development model on the quality of life in elderly or HESS Model. It was a model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province as it shown in a Figure 3 below:



**Fig. 3.** A development model on the quality of life in Elderly or HESS Model (Developed by Nawasanan Wongprasit, 2018)

According to Figure 3, there are four dimensions delineating a development model on the quality of life (HESS Model) or a model of holistic development for the elderly's quality of life through a sustainable participation process:

**1. H: Health:** It means a dimension of the elderly's good physical and mental health. According to this dimension, the elderly's quality of life would be developed in physical and mental aspects. Its roles consisted of five aspects as follows:

1.1 The elderly – There must be the knowledge and ability of taking care of oneself in accordance with an appropriateness of individuals' different contexts.

1.2 Family – There must be the support of taking care of the elderly's health. If the elderly were ill with chronic diseases, they must be taken to see doctors as appointed. In cases where they were not ill, they must be taken care of with healthy eating, suitable exercise and joyful emotion. This was called the 3E principle.

1.3 Community – People in the community must be friendly with, understand, and help the elderly in their neighborhood in both normal situations and emergencies.

1.4 Public sector – The public sectors, particularly the sub-district health promotion hospitals, should visit to take care of the elderly's health appropriately and should organize the health promotion activities in tandem with bodily care.

1.5 Local administrative organization – the local administrative organization should take care of the elderly's health as needed.



**2. E: Economy:** It means the elderly were able to lead their life independently. It consisted of five roles as follows.

2.1 The elderly – The elderly could earn their living as their physical condition permitted. They must be economical.

2.2 Family – The elderly must receive financial support from members of their family as possible.

2.3 Community - The community must support the elderly in ways of earning appropriately.

2.4 Public sector: The public sector should allot capital, budget as well as to support their ways of earning appropriately.

2.5 Local administrative organization – the local administrative organization should support capital and budget for the elderly. Also, the production and selling of products from the elderly in the community should be supported.

**3. S: Safety:** It means the elderly should be supported in having a pleasant surrounding inside and outside their home. The support should be focused on the elderly's toilet, road, transportation, places in community, exercise areas, etc. It consisted five roles as follows:

3.1 The elderly – They should keep their houses tidy, clean and safe.

3.2 Family – Members of a family should appropriately and safely prepare the room, toilet, and house vicinity for the elderly.

3.3 Community – The community should support and promote in preparing the places in community for the elderly.

3.4 Public sector – It should support and promote the public utility in the community for the elderly.

3.5 Local administrative organization – It should support and promote both budget and policy for preparing public utility, as well as safe and convenient roads for the elderly.

**4. S: Social Support:** It means good social support, such as building up an elderly's network in the community and neighboring communities in order to develop and exchange the mutual guidelines for taking care of the elderly. This included an exchange of trainers and a workshop for income promotion. The activities consisted of inviting the elderly from Phanom Sarakham District to be trainers for demonstrating how to make Dok Mai Chan for the elderly in Tha Takiab District. Also, an efficient work system should be practiced, such as women assembling in the village, sub-district, district and province.

For the research dissemination, the researcher presented to the community leaders and the operational team at the village assembly hall in order to inform them of her results and to suggest the guidelines for the holistic participatory development of the elderly's quality of life. Incidentally, the problems arose from the villagers and it was the village's product. In order to bring a sustainability to the community, the village committee or community leaders should realize these problems. Also, they should launch the operation after this research was completed in order that the operation was apparently responsible and continuously implemented. The meeting assigned the village's public health volunteers and the chair of village's women development group to operate continuously. The operational team was required to present continuously the results of the mission's operations to the meeting. Moreover, the operation of the village's elderly club was the platform for the elderly's sustainable development and support network. After the research was completed, the elderly's club of Moo 2, Tha Khan Village was established on June 9th, 2019. Apparently, this research was a significant part to encourage the community to place a high priority on the elderly's quality of life. Also, the research played a pivotal part in encouraging the community to establish the elderly club which it had never existed before. It was a significant starting point for the participation and mutual development of the community.

## 5. Discussion

According to the study, the researcher would like to present two important issues for discussion. They were as follow:

1. For the issue on problems of the need for development of the quality of life among the elderly in Tha Khan Sub-district, Tha Takiab District, Chachoengsao Province, the first important problem was that of economic aspect. The elderly wanted more income. It was in accordance with a study of [17] who had studied the development of the elderly's quality of life in Singburi Province. Their study revealed that some of the elderly had faced an economic problem and needed an assistance from their family. In addition, their family's income form agriculture

was not consistent or determinable. They were also in responsibility to take care of children and grandchildren. They were afflicted from financial problems like debt, lack of money saving and financial planning. Moreover, it was found that most of the elderly had no regular job, causing their income was consistent and determinable. Their family was tightly obliged with debt. With any additional income, they lived on the government's monetary support. It was in accordance with a study of [18] who had studied the guidelines for the development of the elderly's quality of life of the local administrative organization in Phrea Province. It was found that the overall of problems on the development of the elderly's quality of life concerning the health and hygiene, society, family and financial condition, they were at a high level.

Incidentally, all the problems might be arisen from an insufficient income for their expenditure because the elderly—the research sample—lived on agriculture. Also, they were in lacks of knowledge and understanding on saving money before they become old. In the past, they had been strong enough to earn their living and take care of themselves and family. However, when they became old, their physical capability became deteriorate, especially their organ and muscle functions. By this, it caused a decreasing ability of earning their living. Definitely, their income from agricultural works became decreased because they needed physical ability and strength as well as muscle durability.

According to the aforementioned reason, the elderly in Moo 2, Tha Khan Sub-district, Tha Tabiab District, Chachoengsao Province, needed for economic development or wanted to increase their additional income for better quality of life.

2. As the results of the study, it showed that the elements of the development model of the elderly's quality of life in Tha Takiab District, Chachoengsao Province or the model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, Thailand consisted H: Health, E: Economic, S: Safety, S: Support System). They were called HESS Model. By this, "H" (Health) meant having a good health in both physical and mental aspects. "E" (Economy) meant an economic element. They must have more income. "S" (Safety) meant safety in their living and leading their life in a safe habitation. "S" (Social Support System) meant the elderly were support for having a better quality of life from both government sectors and local administrative organizations. It was in accordance with a study of [19] which had studied the development of a model of participatory health promotion for the elderly in the community. The result revealed that the elements of health promotion model were community's participation, local administrative organization, public organization, health service entrepreneur, social development, and human security. By this, these elements played a significant role in mobilizing the elderly's thought to a real practice in order to support good health under individuals' suitability. Undeniably, it affected the elderly's better quality of life in various dimensions in their every life like physical health, mental health, economy, surrounding, and society. It was in accordance with a study done by [20]. They had studied a development model of elderly's quality of life in Buriram. The result revealed that the elderly should develop and help themselves. Those who took care of the elderly and members of the family should assist and place an importance on them. The government organizations i.e. local administrative organizations and subdistrict health promotion hospitals should be responsible for developing the elderly's quality of life. They should allocate the elderly for social welfare, health activities, life and property security, appropriate surrounding, potential promotion activity, courses of training, facilities, public service, and community participation promotion.

Incidentally, due to the fact that the quality of life was individual's personal emotion toward surroundings in their everyday life and living like members in the family, community, society, civil servants, local administrative organizations, sub-district headman, village headman, doctors, nurses, health officers etc. Moreover, the quality of life still meant non-living surrounding like road, public places, toilet, park, recreational places, stadium etc. Obviously, it might be said that these elements were holistic and everything related to develop the elderly's effective quality of life because all parts played an important role in differently developing the elderly's quality of life. However, to develop the quality of life, there must be completely elements in both controllable internal factors and uncontrollable external ones. By this, it could facilitate a complete development under the necessary elements. It was in accordance with a study done [21]. The study revealed that factors affecting the achievement motive model of volunteers of Sa Kaew Province must be consisted of internal and external factors.

According to the aforementioned reasons, the model of holistic development of the elderly's quality of life through sustainable participation process of the community of Tha Khan sub-district, Tha Takiab District, Chachoengsao Province should be completely consisted through a participation of all sectors—from the elderly, family, society, community, and support system from the public sectors. It was in accordance with [22] who had studied a relation of understanding perception concerning the model of health promotion in physical activity and health food consumption among the 50-69-year rural old women. The findings revealed that the factors could predict the rural old women's health promotion behavior. The factors were perception of personal capability, benefit

perception, and high-level personal promotion. It was in accordance with [23] who had studied factors affecting models of health promotion for the elderly's life. The study focused on the Korean elderly living in both rural and metropolitan areas in Korea.

The findings revealed that the factors predicting the model of lifestyle and health promotion were benefit perception, self-capability perception, and interpersonal influence. It was in accordance with a study of [24] revealing that the model of the elderly's health development required for holistic elements. It consisted of a complete care with covered goals, physical health, food consumption, mind, society, and learning for the elderly. It was also in accordance with the study done by [25] revealing that the social or community activities had an influence to the elderly's activity attendance than personal activity. Therefore, the elements of the model of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, Thailand, covered all dimensions which had been related as the instrument for sustainable and effective development of the elderly quality of life.

## 6. Conclusion

This participatory action research was conducted with mixed method in which quantitative research and qualitative research had been integrated. The research was done with Plan-Do-Check-Action process or PDCA process. The objectives of this research was to create a model and an experiment of the holistic development of the elderly's quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province, Thailand.

The key informants of this research consisted of elderly, families, government officers, community leaders, and local leaders. The population of quantitative research were elderly living in Moo 2 of Tha Kan Sub-district, Tha Takiab District, Chachoengsao Province. The statistics used for quantitative data analysis was percentage, means, standard deviation, and ANOVA. The content analysis was used with qualitative data. The research results found that the model of promoting holistic quality of life through participation process for sustainability of the elderly at Tha Takiab District, Chachoengsao or the warm house model (HESS Model) consisted of 4 dimensions as follows: H: Health refers to the dimension of good health for the elderly physically and mentally. The elderly must have knowledge of self-care and be able to take care of themselves as appropriate for each individual context. E: Economic means the elderly who were well-being and can be self-reliant. the elderly should work according to their physical condition and spend economically. S: Safety means good surrounding with safety for the elderly, both inside and outside their home including elderly toilets, travel, roads, various places in the community, and fitness centers, etc. S: Social Support means good support from society such as establishing a network of elderly people in their own communities and nearby to develop and exchange guidelines in caring older people mutually.

Recommendation to implement for benefits, the research found that government agencies or government officers should give priority and go to work take care of the elderly in the community at the village level more than in the past. In addition, it found that there is a lack of information sources for development of the elderly in the community; therefore, there should be a training and inform news about supporting various grants to the people and the elderly more thoroughly

## 7. Suggestion

### Suggestion for Research Integration

1. According to the research, it was found that all relevant sectors played a pivotal role in taking a sustainably care the elderly's quality of life. However, it was also found that the integration of the policy to practical operation for taking care of the elderly in a community level was a main problem among community leaders because the community leaders had to run their own business and be responsible for other missions. By this, the research would like to suggest that the public sectors and civil servants should place more importance on missions on the elderly in the community, particularly in the village level. Also, the authority should appropriately assign the relevant officers to follow up and support continuously with an understanding on the context of people in the villages.

2. According to the study, the researcher found the problem on a lack of information source for integration of development of the elderly in community. By this, the research proposed that the community leaders and civil servants relevant to the community should organize workshops for the people and inform them sources of financial support thoroughly. Moreover, the relevant officers should place an importance on field-work action and problem-penetrating access in order to alleviate people's problem.

### Future Research Suggestion

1. There should be factors affecting the community's participation on the development of the elderly's quality of life in order to response to the national strategy concerning the aged society.

2. There should be a study of the development guidelines on the government sector's welfare allocation affecting the elderly's quality of life in Thailand.

3. There should be a study to compare the elderly's quality of life with other communities in order to understand the strength and weakness for more efficient improvement and development on the elderly affairs.

4. There should be a quantitative study in order to investigate the concept on the development of the model and an experiment of elderly holistic development of quality of life through sustainable participation process in Tha Takiab District, Chachoengsao Province.

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