



The effects of an empowerment program to have a good quality of life and long life for elderly people in Phrae Province, Thailand

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ABSTRACT

This is a quasi-experimental research project that aims to study the effects of an Empowerment Program for elderly people to have a good quality of life and long life, by comparing the perception of a good quality of life and health behaviors among elderly people 60 years old and older who live in Phrae Province. There are 30 samples in the control group and 30 samples in the experiment group. The result reveals, as follows: 1) the average score of the quality of life and health behaviors after the experiment are higher than their previous scores before the experiment among the elderly people in the experiment group that participated in the Empowerment Program, 2) the average scores of the quality of life and health behaviors between elderly people in the experiment group and the control group, compared after the experiment group participated in the Empowerment Program, are different which have a statistical significance (p -value < 0.05). The elderly people that participated in the Empowerment Program have higher average scores of quality of life and health behaviors.

1. Introduction

The National Statistical Office (2017) conducted a survey of Thai people around the country in 2017 and identified the overall number of elderly people, those at the age of 60 years old and older, in the country at 10,225,322. Among them, 2,093,071 elderly people, which were accounted for 15.45 percent of the total number, lived in the North. The proportion of elderly people in the North was also higher than in other regions as they were accounted for 17.30 percent of the total population of the North. From the survey, they found that the 5 provinces with the highest numbers of elderly people were Chainat Province, Phrae, Uttaradit, Phichit, and Sing Buri (The National Statistical Office, 2014). Phrae Province had a total population of 448,551 people. Among those people, there were 217,220 men (48.47 percent), 231,331 women (51.57 percent), and 1066 elderly people of 90 years old and older (The National Statistical Office, 2017). In Nong Muang Khai District, there were 17,803 people, which were comprised of 8376 men and 9427 women. In Tamnak Tham Subdistrict, a subdistrict of Nong Muang Khai District that has a total area of 11.125 square kilometers, there were 3336 people. Among them were 845 elderly people (25.32 percent), which were comprised of 350 men and 495 women (Tamnak Tham Subdistrict Development Project Report, 2017). Therefore, it can be seen that this subdistrict is an aged society, whereas the proportion of elderly people accounted for more than 20 percent of the total

population (Anantakun, 2017).

In Tamnak Tham Subdistrict of Phrae Province, the number of individuals that were becoming elderly people was, as follows: 602 people at the age between 50 and 59 years old, 647 people at the age between 60 and 69 years old, 157 people at the age between 70 and 79 years old, and for 42 people 80 years old and older. There were also 102 people with disabilities and 122 people with chronic diseases and bedridden. Most of these people do not receive proper care, in terms of receiving support and meeting their needs of receiving support (Tamnak Tham Subdistrict Development Project Report, 2017). In the past, there was a collaboration between the village health volunteers (VHVs), the Subdistrict Health Promotional Hospital (SHPH), staff of the Subdistrict Administrative Organization (SAO), the elderly people, and even the people with disabilities, to support these people. There was also a collaboration in the form of a network of various associated organizations that aimed to arrange supporting activities for elderly people. In terms of the development of the elderly people care system of Tamnak Tham Subdistrict Administrative Organization, Tamnak Tham SAO developed its elderly people care system since 2010. Later, Tamnak Tham SAO became the leading party in driving the elderly people's healthcare system for this community in 2014, as they studied the situations, problems, and demands of the community that, in turn, lead to a concrete development on this subject. For example, the exercise promotion campaign, the health education campaign for elderly

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people, etc. (Tamnak Tham Subdistrict Development Project Report, 2017).

Health promotion is a widely known and accepted concept. Strengthening the people's basic health also empower them to make the decision regarding, and participate in, activities that promote their health. This includes the arrangement of useful sources, whether in terms of education, society, and environment, to support and promote good health behaviors among the people and to reduce the risk factors of diseases. Another example is the concept of the "3 Aor. 2 Sor." for good health proposed by Thai Health Promotion Foundation (ThaiHealth) (3 Aor = food, exercise, and emotion; 2 Sor. = no smoking and no drinking) (Thai Health Promotion Foundation, 2017). Chernoff (2001) believed that conducting the health promotion campaign for elderly people will help improve their quality of life and give them long life; and that it can be done by developing a health promotion campaign that emphasizes the change of behavior. Chatwetch (2003) also similarly remarked that the health promotion campaign can be used with individuals who want to change their health behaviors, and who need empowerment that gives them the determination and the will to change their behavior.

Using the technique of empowerment with elderly people, that is, making them feel to be in power, facilitates various developments in the life of elderly people whether in terms of their health, living, etc. Empowerment stimulates unity, assistance, and support among elderly people, it also gives them knowledge, skills, and abilities. Empowerment improves their self-concept, allows them to realize their values, and further improves their potential so they may enjoy a good quality of life and long life. Empowerment is a process that requires time, as it is an evolutionary process that proceeds gradually. With empowerment, people will gradually develop and improve their powers and abilities (Havens and Mills, 1992; as referenced by Chatwetch (2003)).

Empowerment is a concept that explains the social process. It is a demonstration of acceptance, admiration, promotion, development, and improvement of individuals' abilities, to answer their owned demands and solve their owned problems (Gibson, 1995). Empowerment also involves the abilities to use the necessary resources for living in a manner that stimulates self-confidence and the feeling of being empowered, that they are able to control their lives or lifestyles. The development of the Elderly People Assistant Program, which emphasizes the use of empowerment with the concepts of promotion and education, aims to allow elderly people to be self-reliant, be confident in their owned abilities to prevent and control diseases, to be able to choose the methods for taking care of themselves appropriately, as well as to promote them to be more active in taking care of themselves (Anderson, 1995a, 1995b, p. 412; Feste, 1992, pp. 922–923). The concept of empowerment originates from the belief that power is the main resource for living that exists in every one of us. Power is the ability to influence anything that occurs to us (Miller, 1992, p. 3). Power also means the potential or the capability to achieve our objectives (Hawks, 1992).

Therefore, the authors were interested in studying the effects of the Empowerment Program for elderly people in Tamnak Tham Subdistrict of Phrae Province. The empowerment program aims to stimulate elderly people to be more active in taking care of themselves, to be self-reliant, to be confident in abilities to prevent and control diseases, to be able to choose the self-care methods appropriately, and to have good health behavior that ultimately allows them to have a good quality of life and long life; using the Concept of Empowerment suggested by Gibson (1995). Gibson's Concept of Empowerment involves the problems, causes, and effects, and the behavior that allow elderly people to have a good quality of life and long life; as well as the elderly people's perception of their power and behavior over the control of their health behavior, with the goal of changing their health behavior.

1.1. Research objectives

1. To study and compare the quality of life and health behavior of the elderly people before and after participating in the Empowerment Program for elderly people to have a good quality of life and long life.
2. To study and compare the quality of life and health behavior of the elderly people, between the experiment group and the control group, before and after participating in the Empowerment Program for elderly people to have a good quality of life and long life.

1.2. Research hypothesis

Elderly people in Tamnak Tham Subdistrict of Phrae Province in the experiment group will have a higher average score of quality of life and health behavior, in comparison to elderly people in the control group, after they participate in the Empowerment Program for elderly people to have a good quality of life and long life.

2. Method

This is an experimental research project that studies with 2 groups, namely, the control group and the experiment group, in order to study and compare the effects of the Empowerment Program for elderly people to have a good quality of life and long life.

The independent variable is the Empowerment Program for elderly people to have a good quality of life and long life, which is comprised of: 1) discovering the actual status, 2) critical reflection, 3) making the decision to choose the method for conducting activities appropriately, and 4) maintaining an efficient practice (Gibson, 1995).

The dependent variables are a good quality of life and the elderly people's perception of their power over the control of their health behavior, which is comprised of 4 aspects, namely: 1) the perception of the success of their situation, 2) self-satisfaction, 3) self-development, and 4) having the goal and meaning of their life, regarding the change of their health behavior.

2.1. Participants

The population studied in this research project was elderly people who live in Phrae Province. The sample size was determined using the criteria of Dempsey and Dempsey (Dempsey and Dempsey, 1992; as referenced by Chatwetch (2003, p. 37)). Dempsey and Dempsey suggested that the minimum sample size should be 60 samples, with 30 samples in the control group and 30 samples in the experiment group.

In order to make sure that the characteristics of samples in the control group and the experiment group as close as possible, the authors chose elderly people for the control group and the experiment group from different districts, in order to reduce the opportunity that the samples may meet and exchange their opinions (the Contaminated Effect), using the purposive sampling method, as per the desired characteristics, as follows.

The inclusion criteria:

1. Elderly people aged 60 years old and older.
2. Living in Phrae Province.
3. Must not suffer from severe conditions, for example, paralysis or unable to help themselves.
4. Must be a person of sound mind and able to communicate by speaking, reading, and writing, with the Thai language.
5. Must be happy to cooperate with the research project and able to participate in the program for more than 80 percent.

2.2. Research instruments

This research project used 2 types of instruments to collect the

required data, as follows.

The experiment instrument used is an Empowerment Program that the authors created from reviewing the literature on changing health behaviors and on the subject of empowerment, based on the Concept of Empowerment suggested by Gibson (1995). The empowerment program comprised of 4 stages, namely, discovering the actual status, critical reflection, making the decision to choose the method for conducting activities appropriately, and maintaining an efficient practice. The empowerment program also used the health promotion guideline, the form for recording health behaviors, the survey form for the quality of life, and the evaluation form for the elderly people's behaviors. The evaluation form collected the data on 4 subjects, namely, the perception of the success of their situation, self-satisfaction, self-development, and having the goal and meaning of their life, regarding the change of their health behavior. The evaluation form used a rating scale of 5 points.

The content validity was verified by 3 experts in this field. The authors calculated the Content Validity Index and the Index of Item Subscale Congruence (IOC), from 0.60 to 1.00. The authors then amended the items of the evaluation form as per the experts' recommendation and determined the instrument reliability by testing the questionnaire (conducting a Try out) with 30 elderly people of similar characteristics that were not part of the samples. The authors then determined the questionnaire reliability, using Cronbach's Alpha Coefficiency, which yielded the instrument reliability and questionnaire reliability of 0.88 and 0.91, respectively.

2.3. Ethical considerations

This research project was approved by the Naresuan University Ethics Review Committee for Research Involving Human Research Subjects; COA No. 355/2019, IRB No. 0105/62, dated August 7th, 2019–August 7th, 2020.

2.4. Data collection

The authors requested permission from the chief executive of the Subdistrict Administrative Organization of Tamnak Tham District, Nong Muang Khai District and from the Municipality Office of Den Chai Subdistrict of Phrae Province to collect the data from elderly people. After acquiring the permission, the authors collaborated with the community development officers, who served as the coordinators of Tamnak Tham Subdistrict, and the professional nurses in the Municipality of Den Chai Subdistrict in order to explain the research objectives, benefits, methods for protecting the samples' rights and methods for data collection with the potential participants for the Empowerment Program. The authors collected the data between August and October of 2019.

The activities were arranged in group activities, as elderly people were divided into 3 groups, with 10 people in each group, with one member of the authors, who was also a senior nurse, who served as the group leader. These groups participated in 4 activities that took approximately 60 min at a time, with a rest period of 7 days between each activity. In the 8th week, which was the last week of the project, the authors evaluated the result of the empowerment program as well as the elderly people's perception of their power and health behavior.

2.5. Analysis

The authors analyzed the data using a computer program, as follows.

1. Comparing the quality of life and the good health behavior within the experiment group, before and after the experiment, using the paired T-test for the statistical analysis.
2. Comparing the quality of life and the good health behavior between the experiment group and the control group, using the Chi-Square and Independent T-test for the statistical analysis.

3. Results

This is an experimental research project that studied 2 groups of samples for the effects of the Empowerment Program for elderly people in Phrae Province to have a good quality of life and long life.

1. The basic data of the samples were encoded into the program, categorized by their age, gender, marriage status, number of children, level of education, occupation, income, congenital disease, smoking behavior, and drinking behavior; which were analyzed using the Chi-Square statistic; and the quality of life and the health behavior, which were analyzed using the Independent t-test between the 2 groups of samples, namely the experiment group and the control group. The analysis revealed an insignificant difference between 2 groups except for one factor, gender, where they were significantly different, which had statistical significance (p-value < 0.05). There were more men in the control group than in the experiment group; and samples in the experiment group did not smoke or drink.
2. The comparison of the average score of the quality of life and health behavior of elderly people in the control group, before and after participating in the empowerment program for the elderly people in Phrae Province to have a good quality of life and long life, revealed that the average scores of the quality of life and the health behavior were significantly different which had the statistical significance of 0.01 (p-value < 0.01) Elderly people in the experiment group, after attending the program, had higher average scores of the quality of life and the health behavior, in comparison to their scores before attending the program, as depicted in Table 1.
3. The comparison of the quality of life of elderly people in the experiment group and the control group, after attending the empowerment program for elderly people in Phrae Province to have a good quality of life and long life, revealed that the average scores of the quality of life of the 2 groups were significantly different, which had the statistical significance of 0.05 (p-value < 0.05). The overall quality of life of both groups of elderly people was quite good, that is, the quality of life score of the experiment group was at 86.7 percent while the control group's score was at 53.3 percent. Therefore, it can be seen that the experiment group had a better quality of life than the control group, as depicted in Table 2.
4. The quality of life of elderly people in the experiment group and the control group, after the experiment group attended the empowerment program for elderly people in Phrae Province to have a good quality of life and long life, when compared revealed that the average scores of health behavior of the 2 groups were significantly different, which had the statistical significance of 0.01 (p-value < 0.01). The average health behavior scores of elderly people in the experiment group were higher than the control group, as depicted in

Table 1
Comparison of the average scores of the quality of life and health behavior of elderly people in the experiment group, before and after attending the empowerment program for elderly people in Phrae Province to have a good quality of life and long life.

	Before the experiment (n = 30)		After the experiment (n = 30)		t-test	p-value
	x	SD	x	SD		
Quality of life	91.33	11.61	116.03	14.59	7.692**	0.000
The overall health behavior of elderly people	4.05	0.45	4.78	0.43	7.948**	0.000

**p-value < 0.01.

Table 2

Comparison of the quality of life of elderly people in the experiment group and the control group, after attending the empowerment program for elderly people in Phrae Province to have a good quality of life and long life.

Quality of life	Before the experiment (n = 30)		After the experiment (n = 30)		χ^2	p-value
	Number	percent	Number	Percent		
Physical factors					6.787*	0.005
Not good	–	–	–	–		
Moderate	8	26.7	18	60.0		
Good	22	73.3	12	40.0		
Mental factors					4.022*	0.021
Not good	–	–	–	–		
Moderate	5	16.7	12	40.0		
Good	25	83.3	18	60.0		
Social factors					9.380*	0.005
Not good	1	3.3	1	3.3		
Moderate	5	16.7	16	53.3		
Good	24	80.0	13	43.4		
Environmental factors					9.320*	0.001
Not good	–	–	–	–		
Moderate	4	13.3	15	50.0		
Good	26	86.7	15	50.0		
Overall quality of life					7.937*	0.002
Not good	–	–	–	–		
Moderate	4	13.3	14	46.7		
Good	26	86.7	16	53.3		

**p-value < 0.01.

Table 3.

4. Discussion

1. The comparison of the quality of life and health behavior of elderly people in the experiment group, before and after participating in the Empowerment Program, revealed that their quality of life and health behaviors were different. The average scores of the quality of life and health behavior of elderly people after participating in the Empowerment Program for elderly people to have a good quality of life and long life were much higher than before. This finding is consistent with the study conducted by Chatwetch (2003) who studied the use of a 5-week empowerment program and found that merely 1 month of participation in the empowerment program was enough to allow participants to acknowledge their increasing power and to be more determined and willing to change their behavior. It can be concluded that the underlying reason for elderly people in Tamnak Tham Subdistrict of Phrae Province wanted to adjust their health behavior was their participation in the Empowerment Program, as suggested by Gibson (1995). The Empowerment Program is

comprised of 4 consecutive steps that stimulate elderly people to improve their potential and abilities, until they are confident that they can take care of themselves, and have the feeling of being in power. These 4 steps of empowerment are, namely, discovering the actual status, critical reflection about their situation, making the decision to choose the method for conducting activities appropriately, and maintaining an efficient practice. The program's activities were arranged as group activities for 3 groups of participants, with 10 elderly people in each group and one member of the authors, who was also a senior nurse, served as the group leader. These groups participated in 4 activities that took approximately 60 min at a time.

The Empowerment Program took one month to complete and started from strengthening the relationship and trust between members, collecting members' information by treating such information as confidential and stimulating members to reveal the truth, stimulating members to accept each other people's individuality and to listen to other people's opinions. The program arranged an appropriate environment for members to meet and encouraged them to express their opinion on health promotion, with a focus on the concept of the "3 Aor. 2 Sor." for good health proposed by the Thai Health Promotion Foundation (ThaiHealth). The program encouraged elderly people to exchange their opinions while providing them with the source of information on the subjects of how to maintain their physical and mental health. The program encouraged elderly people to write a diary of their daily life, namely, if they were eating 3 meals a day, what methods of cooking and types of raw materials were used for the preparation of those meals, have they tried to avoid foods that may produce negative health effects, have they done any exercises, how were they dealing with stress, did they recognize the harmful effects of smoking and drinking, and did they have access to public healthcare. Moreover, after the elderly people were able to discover their actual status, they will be able to further improve themselves. Elderly people were now able to re-evaluate their problems, to re-consider their situations from different perspectives that lead to a clearer – better understanding of the issues and ultimately lead them to better solutions and changes. Afterwards, the elderly people will be able to consider all the available information and choose the most appropriate course of action to deal with and to manage the related factors.

Elderly people will now seek out and meet with other people, in order to exchange information with them, information that will help them to make the decision on their own (self-determination). An individual may have several options available for him or her to choose, depending on the methods they used for acquiring the solutions, using their own rationale, which can be different from one another. This is the last stage of the empowerment process, whereas after elderly people implement the solution they choose efficiently or effectively and reach the goal they have, they will be more confident in themselves. Elderly people will have the feeling of being in power, being able to do things, and will maintain and reapply that behavior to the next situations they

Table 3

Comparison of the quality of life of elderly people in the experiment group and the control group, after attending the empowerment program for elderly people in Phrae Province to have a good quality of life and long life.

Elderly people's health behavior	Before the experiment (n = 30)		After the experiment (n = 30)		t-test	p-value
	x	SD	x	SD		
Perception of the success of their situation	4.76	0.40	3.89	0.59	6.642**	0.000
Self-satisfaction	4.80	0.41	4.00	0.67	5.499**	0.000
Self-development	4.74	0.56	3.87	0.47	6.449**	0.000
Having the goal and meaning of their life, regarding the change of their health behavior	4.84	0.47	4.27	0.50	4.516**	0.000
Overall	4.78	0.43	4.01	0.48	6.477**	0.000

**p-value < 0.01.

face. This finding is consistent with a research study conducted by Chernoff (2001), who studied about foods and health promotion for elderly people by developing a health promotion plan that emphasized the changes of their food-related behaviors. His study revealed that the food-focused health promotion plan stimulated the change in elderly people's health behavior and encouraged them to eat better.

2. The comparison of the quality of life of elderly people in the experiment group and the control group revealed that, after participating in the Empowerment Program, the experiment group had different scores of having a good quality of life and long life. That is, the average scores of the experiment group were significantly higher than that of the control group, with the statistical significance of 0.05. This finding is consistent with the hypothesis that, before participating in the program, the elderly people's quality of life will not be drastically different and at a moderate level. After participating in the program, the overall quality of life scores of elderly people in the experiment group improved at 86.7 percent. The experiment group's scores were not at an excellent level and much higher than the control group. It can be concluded that the concept of health promotion is a generally accepted concept.

Strengthening the people's basic health and also empowering them to make decisions regarding, and participate in, activities that promote their health. This includes the arrangement of useful sources, whether in terms of education, society, and environment, to support and promote good health behavior among the people and to reduce the risk factors of disease. Another example is the concept of the "3 Aor. 2 Sor." for good health proposed by Thai Health Promotion Foundation, namely, eating the five basic food groups with every meal, focus on eating natural foods that contain no chemicals; exercising appropriately, as per the elderly people's condition, in order to stimulate them to move their bodies; managing their stress, participating with community's activities, and giving them access to medical services instantly and continuously, in order to promote good health. This finding is consistent with the research study conducted by Drewnowski and Evans (2001) that studied the effects of foods, exercise, and quality of life of elderly people. They found that foods and exercise were statistically and significantly related to the elderly people having a good quality of life.

Health promotion is a process that improves elderly people's ability to take control and improve their own health (Primary Health Care Division, Department of Health Service Support, 2009). After participating in the health promotion program, arranged under the concept of empowerment suggested by Gibson (1995) that aims to empower the elderly people of Tamnak Tham Subdistrict. Elderly people of Tamnak Tham Subdistrict were more confident in their abilities. They were able to improve their potential and abilities to control factors that influence their quality of life and well-being. The program stimulates the learning process through group activities that emphasize empowerment-related subjects, including the problems, the causes, and the effects; and behaviors that improve their quality of life. Moreover, the Subdistrict Administrative Organization of Tamnak Tham also arranged additional activities for elderly people, including, arranging the occupational training for the group of women in the community to learn how to weave plastic strands into handbags and sell them. The group earns income from their products and elderly people who participated in this activity also gained additional income as well. Also, as the community's wish to create a school for elderly people in the subdistrict was consistent with the policy of executives of the SAO of Tamnak Tham to create a school for elderly people, in order to arrange health promotion activities for them. SAO of Tamnak Tham created the elderly people school in April of 2015, with the collaboration with the Office of Social Development and Human Society of Phrae Province, using the facilities of Ban Saliang Tai School for arranging the health promotion activities for elderly people. The elderly school arranges health promotion and

education activities, exercising activities, occupational training courses, etc., on Monday, Wednesday, and Friday. As a result, the elderly people in the community have good health and improved abilities, whether for taking care of themselves, for exercising, producing various products, etc.

3. The comparison of the average health behaviors scores of elderly people in the experiment group and the control group revealed that, after participating in the empowerment program, elderly people in these groups had different average health behavior scores. Elderly people in the experiment group had significantly higher average health behavior scores, with the statistical significance of 0.01. This finding is consistent with our hypothesis and the research study conducted by Chernoff (2011), which studied the subjects of foods and health promotion for elderly people, in order to develop a health promotion program that emphasizes the change of elderly people's health behavior and encouraged them to eat better. Under this empowerment program, elderly people were empowered while going through 4 steps of the empowerment process, as suggested by Gibson (1995). Gibson suggested that empowerment is an interpersonal process, whereas steps of the empowerment process are all connected and that their orders can be swapped. For elderly people to pass each step, they will require the mental power, will, imagination, and ability. After getting through these steps, elderly people will recognize their abilities to control their life and able to choose the appropriate method for managing their health. As a result, elderly people will have the feeling of being in power, pride, and self-respect. In order for elderly people to properly choose the methods for managing their health, their decision-making process must involve the consideration and understanding of the involving factors, in order to create the correct understanding and to change their behavior accordingly. However, after elderly people pass all 4 steps of the empowerment process, they will attain a result that, in turn, allows them to achieve their desired goals, that is, having a good quality of life and long life. This finding is consistent with our hypothesis, that is, elderly people will have the power to manage their health successfully. They will be more confident in their improved abilities. They will have the power to achieve their goals of having good health. They will be confident and proud of themselves. Their average scores after participating in the empowerment program were at an excellent level, therefore, it can be seen that the empowerment process can be used to encourage elderly people to recognize their abilities to taking control of their lives, to choose the method for managing their health appropriately, and to set the goals and the plan for achieving said goals, as they control and evaluate their own actions. Moreover, as a member of the authors is a professional nurse, who served as a group leader in the empowerment program, she also played a significant role in supporting elderly people. This is because nurses play important roles in the empowerment process, by encouraging elderly people to have the feeling that they are capable of making their own decisions, dealing with problems, seeking the source of knowledge, and choosing the appropriate solutions accordingly. Nurses help elderly people to control their lives, to have self-respect, to change and adjust their thinking, belief, and hope. Nurses also motivate elderly people to recognize their value (Dangdomyuth, Malai, & Kanhadilok, 2017). The use of group activities and the stimulation of a good relationship with elderly people allow them to be more confident, to participate in group activities, to express their opinions independently, and to exchange their experience. Other activities, including, keeping the dietary diary, exercising, managing stress, taking their medicine, and visiting the doctor regularly as per the appointment allowed elderly people to improve their health behavior. Moreover, Piansriwatchara (2010) remarked that the tricks of living over a hundred years old are by not drinking, not smoking, and being free of Alzheimer's. This is because Alzheimer's is the major cause of

dementia in elderly people; smoking stimulates the aging process and increases the number of free radicals, as well as the risks of lung disease, Emphysema, lung cancer, high blood pressure, stroke, and heart disease. Meanwhile, drinking increases the risk of liver cirrhosis and liver cancer. It can be seen that the elderly people of Tamnak Tham Subdistrict of Phrae Province in the experiment group did neither smoke nor drink. Hence, they had good health behavior.

5. Conclusion

The health promotion and clinical practice also include that nurses, physicians and other health practitioners should welcome and use the empowerment process stimulates the changes in health behavior that can lead elderly people to have a good quality of life and long life. This is because the empowerment process involves the procedures that allow elderly people to have the feeling of being in control of themselves and being able to choose the health management method appropriately. Therefore, elderly people will have the feeling of being in power, pride, and self-respect; and will be able to choose the health management method appropriately.

6. Implication for practice

Every related party should implement the empowerment process with every elderly person, in order to change their health behavior that, in turn, will lead the elderly people to have a good quality of life and long life.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A. Supplementary data

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