

## Factors Affecting Health Tourism Promotion for the Elderly in Nakhon Nayok Province, Thailand

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**Article History:** Received: 10 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 20 April 2021

**Abstract:** The objectives of this research were 1) to study health tourism behaviors of the elderly tourists and 2) to analyze factors affecting health tourism promotion for the elderly in Nakhon Nayok Province. The samples were 400 elderly tourists visiting health tourism attractions in Nakhon Nayok randomized by convenience sampling. The research instrument was a questionnaire and analyzed by frequency, percentage, mean, standard deviation, correlation coefficient, and multiple regression. The research results indicated that health tourism behaviors of the elderly were at a high level in all aspects: knowledge of health tourism, skills for tourism, and attitudes toward tourism. Tourism based on natural farming, organic farming, and the new theory agriculture in accordance with His Majesty's initiative were the most demanded. Moreover, the results revealed that there should be promoting tourist attractions of abundant nature and biodiversity, such as agro tourism attractions, culture attractions, creative tourism attractions, and natural health tourism. Regarding hypothesis testing, demographic differences, namely, age, education and income, affected health tourism promotion for the elderly at the statistically significant level of .05. Tourism behaviors of the elderly were positively related to health tourism promotion: knowledge of health tourism ( $r=0.480$ ), skills for tourism ( $r=0.282$ ), and attitudes toward tourism ( $r=0.517$ ). Based on the results of multiple regression analysis, knowledge of health tourism and attitudes toward tourism affected health tourism promotion for the elderly, and the predictive equation was  $Y = 1.075 + 0.246X_1 + 0.370X_2$ .

**Index Terms:** Health Tourism, Tourism Promotion, Elderly Tourists

### 1. Introduction

Thailand is becoming an ageing society because in 2002 there was an increase of the population aged 60 years or over by 10% and it was predicted that in 2021 Thailand will be the super-aged society. Under this circumstance, public services will be greatly needed, especially health care and the government has to allocate a lot of budgets to support these services [1]. The deterioration of health in the elderly becomes progressively worse over time in terms of physical and mental conditions. Feeling of losing power and worthlessness of the elderly affects self-care and the quality of life. On the other hand, if the elderly keep doing the activities to maintain the social status, they will be raised in the sense of social acceptance resulting in an increase of reinforcement and confidence in self-care. According to Thailand's national strategy, tourism is one of important policies in the economic and social development plan. However, because of an increase of the elderly the population structure is changing; this affects the national development and tourism in the future [2]. Nowadays, health tourism is increasingly popular because it is a kind of special interest tourism that combines visiting tourist attractions and health activities involving with health healing, such as cosmetic surgery, dental care, and so on; or involving with health promotion, such as Thai traditional medicine, healthy food, natural agriculture, mineral bath, meditation, and so on [3]. Nakhon Nayok Province is not far from Bangkok, the capital city of Thailand that is rich in abundant natural resources and biodiversity, so there are many community-based tourism attractions. Consequently, tourism is integrated with Thai wisdom, for example, alternative medicine with healing herbs [4]. Although the businesses of health tourism keep growing, the services do not cover the tourists' interests because they are changing over time. Furthermore, the potentials of the traveling entrepreneurs do not respond to the needs of the tourists and do not connect with the producers resulting in loss of commercial opportunities. For these reasons, the researchers were interested in studying factors affecting health tourism promotion for the elderly in Nakhon Nayok Province in order to explore the elderly tourists' behaviors for the development of health tourism promotion for the elderly in the future.

### 2. Research Objectives

The objectives of this research were 1) to study health tourism behaviors of the elderly tourists, and 2) to analyze factors affecting health tourism promotion for the elderly in Nakhon Nayok Province, Thailand.

### 3. Research Methods

#### A. Research Design

This research employed a quantitative method and the samples were 400 elderly tourists visiting health tourism attractions in Nakhon Nayok calculated according to the Cochran formula [5] with a 95% confidence level and an uncertainty of  $\pm 0.05$ , and randomized by convenience sampling. The research instrument was a 5 rating scale questionnaire validated by 3 experts (IOC = 1.00) and tried out on the 30 elderly to measure the internal consistency ( $\alpha = 0.964$ ). There were 4 parts of the questionnaire: demographic information, health tourism behaviors of the elderly, patterns for the elderly tourist activities, and health tourism promotion. The collected data were analyzed by mean and standard deviation; in addition, the hypotheses were tested by correlation coefficient and multiple regression.

#### B. Research Process

This research was divided into 4 steps as shown in Fig 1: literature review, creating the research instrument, conducting the research, and analyzing the research results.

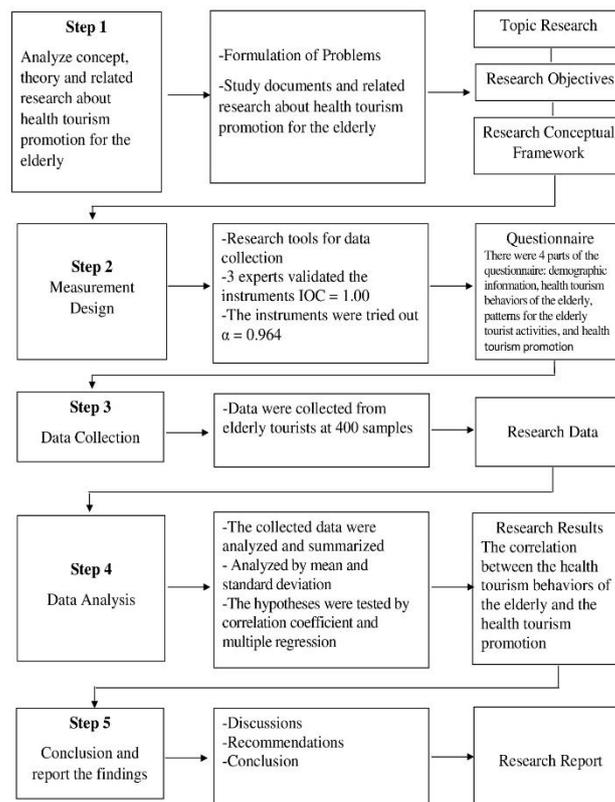


Fig.1 Research process

### 4. Results

The research results could be separated into 2 main parts: the findings from the questionnaire and the hypothesis testing. The first part of the questionnaire was about the demographic information. The results showed that the respondents were 260 female (65.00%) and 140 male (35.00%) and the most respondents were 157 elderly aged between 60 and 69 years old (39.25%). The education of most respondents was in primary level (206 elderly or 51.50%), and the salary of most respondents (271 elderly) was less than 10,000 baht/month (67.75%).

The overall health tourism behaviors of the elderly were at a high level ( $\bar{x} = 4.32$ , S.D. = 0.53).

Considering each aspect of the health tourism behaviors of the elderly, it found that every aspect was at a high level: attitudes toward tourism ( $\bar{x} = 4.47$ , S.D. = 0.52), knowledge of health tourism ( $\bar{x} = 4.38$ , S.D. = 0.58), and skills for tourism ( $\bar{x} = 3.38$ , S.D. = 0.79). The results were shown in Table 1.

**Table 1** The health tourism behaviors of the elderly visiting Nakhon Nayok Province, Thailand

The health tourism behaviors of the elderly visiting Nakhon Nayok Province, Thailand	$\bar{x}$	SD.	Level	Ranking
knowledge of health tourism	4.38	0.58	High	2
skills for tourism	3.83	0.79	High	3
attitudes toward tourism	4.47	0.52	High	1
<b>Total</b>	<b>4.23</b>	<b>0.53</b>	<b>High</b>	

Regarding patterns for the tourist activities, the elderly visiting Nakhon Nayok Province, Thailand had the needs of health tourism at the high level ( $\bar{x} = 3.79$ , S.D.= 0.58) as shown in Table 2. Wellness tourism and medical tourism were at a high level. The former was  $\bar{x} = 4.00$  and S.D. = 0.58; and the latter was  $\bar{x} = 3.58$  and S.D. = 0.79.

**Table 2** The patterns for the tourist activities for the elderly

The patterns for the tourist activities for the elderly	$\bar{x}$	SD.	Level	Ranking
Wellness tourism	4.00	0.58	High	1
medical tourism	3.58	0.79	High	2
<b>Total</b>	<b>3.79</b>	<b>0.58</b>	<b>High</b>	

Since the wellness tourism was the highest, each aspect of wellness tourism was analyzed in details and it found that the most interesting activities for the elderly were visiting natural farming, organic farming, and the new theory agriculture in accordance with His Majesty’s initiative at a high level ( $\bar{x} = 4.34$ , S.D. = 0.79) following by experiencing healthy food and drinks ( $\bar{x} = 4.25$ , S.D. = 0.68), and having traditional Thai massage ( $\bar{x} = 4.24$ , S.D. = 0.81). The results were shown in Table 3.

**Table 3** The needs of wellness activities

The needs of wellness activities	$\bar{x}$	SD.	Level	Ranking
1. Traditional Thai massage	4.24	0.81	High	3
2. Foot massage	4.09	0.89	High	6
3. Herbal compress massage and herbal steam	4.19	0.76	High	4
4. Aroma therapy	3.63	1.06	High	9
5. Water therapy	3.34	1.20	moderate	10
6. Meditation	4.12	0.75	High	5
7. Healthy food and drinks	4.25	0.68	High	2
8. Herbal health and beauty products	3.98	0.87	High	7
9. Natural farming, organic farming, and the new theory agriculture in accordance with His Majesty’s initiative	4.34	0.79	High	1
10. Biodiversity and natural resources	3.86	1.00	High	8
<b>Total</b>	<b>4.00</b>	<b>0.58</b>	<b>High</b>	

The research results of health tourism promotion for the elderly were at a high level in all aspects ( $\bar{x} = 3.93$ , S.D. = 0.59) as shown in Table 4. There were 8 aspects to be considered for the health tourism promotion: attractiveness, accessibility, facilities, tour itinerary planning, tourist activities, travel-related services, community participation, and public relations.

**Table 4** The health tourism promotion for the elderly

The health tourism promotion for the elderly	$\bar{x}$	SD.	Level	Ranking
attractiveness	4.24	0.53	High	1
accessibility	4.03	0.74	High	2
facilities	3.91	0.75	High	4
tour itinerary planning	3.83	0.89	High	6
tourist activities	3.88	0.73	High	5
travel-related services	3.78	0.73	High	8
community participation	3.82	0.75	High	7
public relations	3.96	0.73	High	3
<b>Total</b>	<b>3.93</b>	<b>0.59</b>	<b>High</b>	

As can be seen in Table 4 above, the highest was attractiveness ( $\bar{x} = 4.24$ , S.D.= 0.53) following by accessibility ( $\bar{x} = 4.03$ , S.D.= 0.74), public relations ( $\bar{x} = 3.96$ , S.D.= 0.73), facilities ( $\bar{x} = 3.91$ , S.D.= 0.75), tourist activities ( $\bar{x} = 3.88$ ,

S.D.= 0.73), tour itinerary planning ( $\bar{x}$  = 3.83, S.D.= 0.89), community participation ( $\bar{x}$  = 3.82, S.D.= 0.75), and travel-related services ( $\bar{x}$  = 3.78, S.D.= 0.73).

Each aspect of attractiveness of the tourist attractions was analyzed and the results showed that the highest was tourist attractions of abundant nature and biodiversity, such as agritourism attractions, culture attractions, creative tourism attractions, and natural health tourism ( $\bar{x}$  = 4.32, S.D. = 0.64) following by well-known and popular tourist attractions ( $\bar{x}$  = 4.27, S.D. = 0.74), and clean and pleasant tourist attractions ( $\bar{x}$  = 4.23, S.D. = 0.66) as shown in Table 5.

**Table 5** The health tourism promotion for the elderly in terms of attractiveness

The health tourism promotion for the elderly in terms of attractiveness	$\bar{x}$	SD.	Level	Ranking
1. Well-known and popular tourist attractions	4.27	0.74	High	2
2. Abundant nature and biodiversity, e.g. agritourism attractions, culture attractions, creative tourism attractions, and natural health tourism	4.32	0.64	High	1
3. Standard healthcare services, e.g. hospitals, spa and massage establishments, etc.	4.19	0.71	High	5
4. Readiness of tourist attractions	4.19	0.63	High	4
5. Clean and pleasant tourist attractions	4.23	0.66	High	3
<b>Total</b>	<b>4.24</b>	<b>0.53</b>	<b>High</b>	

Next, the hypotheses were tested of the significant correlation efficient between the health tourism behaviors of the elderly and the health tourism promotion. The results were shown in Table 6.

**Table 6** The correlation between the health tourism behaviors of the elderly and the health tourism promotion

Factor	X1	X2	X3	Y
X1 knowledge of health tourism	1.000			
X2 skills for tourism	0.498**	1.000		
X3 attitudes toward tourism	0.687**	0.538**	1.000	
Y the health tourism promotion	0.480**	0.282**	0.517**	1.000

\*\*p < .01

Table 6 showed that knowledge of health tourism and the health tourism promotion were at low correlation ( $r=0.480$ ), skills for tourism were at very low correlation ( $r=0.282$ ), and attitudes toward tourism were at medium correlation ( $r=0.517$ ). Also, the results indicated that the health tourism behaviors of the elderly and the health tourism promotion were positively correlated at the statistically significant difference of .01.

According to Table 7, the hypothesis testing was also applied by multiple regression with enter method. The relationship between the health tourism behaviors of the elderly and the health tourism promotion were statistically significant at the difference of .01 ( $F = 56.217$ ,  $p < .01$ ). The predictor variables were knowledge of health tourism, skills for tourism, and attitudes toward tourism. The predictive power was 29.80 ( $R=0.546$ ,  $R^2=0.298$ ) and the predictive equation could be formulated as  $Y = 1.075 + 0.246X_1 + 0.370X_2$ .

**Table 7** The hypothesis testing with multiple regression

The health tourism behaviors of the elderly	Unstandardized Coefficients		Standardized Coefficient	t	Sig
	B	Std. Error	Beta		
(Constant)	1.075	.222	.	4.838	.000
knowledge of health tourism	.249	.060	.246	4.156	.000
skills for tourism	-.030	.038	-.040	-.782	.435
attitudes toward tourism	.421	.069	.370	6.068	.000

R = 0.546 R Square = 0.298, Std.Error of the Estimate = 0.496 F = 56.127, Sig = 0.000

## 5. Discussions

### 1. Health tourism behaviors of the elderly tourists

According to the research results, overall health tourism behaviors of the elderly tourists were at a high level as well as each aspect of the behaviors, namely, attitudes toward tourism, knowledge of health tourism, and skills for tourism. This is because the elderly agree that tourism can reduce stress, so they would like to look after the physical and mental health. Participating in health tourism can make the elderly healthier and raised in a sense of social

acceptance. Also, Nakhon Nayok Province is rich in natural resources, very convenient to travel, with enough healthcare services, and potential for carrying the tourists. These factors satisfy and interest the elderly tourists resulting in the positive attitudes from travel experiences and the return of tourists in Nakhon Nayok Province [6],[7]. In addition, [8] said that the elderly tourists had the different tourism behaviors from general tourists because high quality tourism and hospitality greatly satisfied the elderly tourists by taking consideration of standard services, health care, and appropriate activities for age and health. This is consistent with the research of [7] that the elderly in Nakhon Nayok were healthy at a high level by self-care, and accessibility of health service.

2. The patterns for the tourist activities for the elderly Referring to the research results, it found that both kinds of the health tourism: wellness tourism, and medical tourism, were demanded at a high level. This is because health tourism becomes more popular among the elderly including there are many beautiful natural tourist attractions with local culture, and peaceful and delightful destinations. As [9] said earlier, health tourism, for example, visiting beautiful natural tourist attractions or culture attractions as well as learning lifestyles and relaxing were the activities for promoting and restoring health. But when considering each activity, it found that natural farming, organic farming, and the new theory agriculture in accordance with His Majesty's initiative were the highest because Nakhon Nayok Province is popular with natural tourist attractions and agritourism attractions and makes the elderly relaxed and amused with doing the activities and learning the agriculture concurrently. This is consistent with [6] that the top three tourist attractions for the elderly interested in were 1) Bhumirak Dhamachart Natural Center Project (the royal nature conservation center), 2) Suansriya (learning center with agritourism), and 3) Thung Yai Pak Phi (the natural learning center). Also, [10] said that the most favorite activity of the elderly was eating organic vegetables.

### **3. Health tourism promotion for the elderly**

The overall health tourism promotion for the elderly in Nakhon Nayok Province was at a high level. Regarding each aspect, it showed that the attractiveness of abundant nature and biodiversity, such as agritourism attractions, culture attractions, creative tourism attractions, and natural health tourism, was the highest. [6] said that there were a variety of natural resources including forests, waterfalls, mountains, good weather, and abundant environment in Nakhon Nayok Province, so it was popular among tourists and these attractions were supposed to be suitable for the elderly, and [11] found that health tourism attractions the elderly were interested in were the natural tourist attractions. This is consistent with [12] that the attractiveness of health tourist attractions were natural tourist attractions, famous meditation retreats, spa and massage establishments.

### **4. The hypothesis testing**

Regarding demographic information, the elderly with gender differences had no statistically significant difference in the health tourism behaviors and health tourism promotion related to [11] that genders did not affect decision-making to travel for health care as well as health tourism promotion. While the age differences influenced health tourism and health tourism promotion differently. This is because the elderly tourists under 80 years old are still healthier, more vigorous, and more independent than that over 80 years old. This is consistent with [13], and [14] the older people are more risky to physical and mental health problems. Also, the educational differences of the elderly affected health tourism and health tourism promotion differently because the elderly with higher education prefer learning new things resulting in having new visions and new experiences related to [15], and [16] that the tourists with different education had the differences of tourism behaviors. Furthermore, the salary differences of elderly differently influenced the health tourism and health tourism promotion because the higher the elderly had salary, the greater buying power they had, so that they had more opportunities to travel and participate in tourism activities related to [17] that the pensioners were more likely to participate in recreation and tourism activities than the elderly receiving the old age allowance. Moreover, [18] found that the elderly with different sources of income differently had health behaviors at the statistical significance level of .05.

According to the results of a multiple regression analysis by enter method between health tourism behaviors of the elderly and the health tourism promotion, the regression coefficients of knowledge of health tourism and attitudes toward tourism were .249 and .421 respectively and they were statistically significant at level of .01. This is because the elderly tourists with knowledge of tourism promote health tourism for the elderly because it is relaxing and fosters health improvement in terms of physical and mental health brought to positive attitude and then decision-making to travel for health care. Like [19], it found that attitudes influenced the decision-making to travel at the statistically significant level of .05.

## **6. Recommendations**

### **A. Recommendations for Practices**

1. According to the research results, the activities that should be provided in the itinerary were different and interesting and meet the elderly's needs, for example, agritourism with biodiversity including with a silvan atmosphere, healthy food

and drinks provided, traditional Thai massage, herbal steam, and meditation. Furthermore, there should be activities that the elderly could participate in the local communities or try to learn and do something new.

2. The health tourism attractions should be easy to get to, convenient, and safe for the elderly tourists as well as providing the tourism guideline on websites. And they should be improved and developed to carry the tourists.

3. The enough accommodations and facilities should be provided for the elderly in the tourism areas, also the quality of security and public utilities should be improved to support the future activities and elderly tourists.

4. The health tourism officers should be service-minded, skillful, able to organize a trip, and enough for a number of the elderly tourists.

5. There should be using social media for health tourism public relations, such as mobile applications, Facebook, YouTube, and so on in order to make the health tourism information available for everyone.

## **B. Recommendations for Further Research**

1. There should extend the research results to study in terms of the marketing and public relations for the tourists making decisions for health tourism and participating in the health activities.

2. The qualitative research should be applied in the future research by in-depth interview. And the results would be used as a guideline to develop the health tourism attractions.

## **7. Conclusion**

Getting insight of the health tourism behaviors of the elderly can be exploited to improve the strategic plans in order to meet the elderly's needs. The results from the analysis of knowledge of the health tourism and attitudes toward tourism of the elderly showed that they needed tourism for new experiences and learning new things including natural beauty, culture, lifestyles, and learning participation, such as knowledge exchange of health leading to self-care and transferring knowledge to the others. Consequently, the elderly would feel relaxed, relieve stress and improve their health. Moreover, Nakhon Nayok is aimed at tourism, so it has a lot of outstanding tourist attractions. It is also easily accessible with enough health care services. These factors can attract and satisfy the elderly tourists, so these results would be beneficial for health tourism entrepreneurs to adopt and adapt the strategic plans for customer-focused management of health tourism

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