

Health seeking behavior of Japanese retirees in Thailand: a cross-sectional study

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Research

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Abstract

Background

Despite widespread cross-border migration of retirees, little is known about their healthcare seeking behavior in a destination country. This study explores factors related to the use of health services in Thailand by Japanese long-stay retirees.

Methods

A survey of Japanese long-stay retirees aged 50 and older was conducted in cooperation with nine Japanese self-help clubs in Bangkok, Chiang Mai, Chiang Rai, and Phuket. The dependent variable was receiving medical treatment in Thailand in the previous 12 months. People who did not receive treatment in Thailand were divided into two groups; those who had treatment only in Japan and those who did not have treatment anywhere. Independent variables included i) predisposing factors: age, sex, years lived in Thailand, ii) enabling factors: marital status, adjusted annual household income, and iii) need factors: existence of chronic diseases, and health related Quality of Life.

Results

Of 226 eligible participants, 106 persons (47%) received medical treatment in Thailand, 41 (18%) received treatment only in Japan, and 79 (35%) did not in either country in the previous 12 months. The multivariate analysis identified that Japanese retirees who stayed in Thailand less than five years were less likely to see doctors in Thailand. Retirees who had no chronic diseases and did not return to Japan tended not to receive treatment anywhere while those who were covered by Japan's national health insurance and stayed in Thailand for shorter periods in the past 12 months were more likely to get treatment only in Japan.

Conclusion

Thai government's retirement tourism promotion policy should encourage sharing of transparent medical quality and pricing information by medical facilities to promote the trust in Thai medical services. Further studies are required on the impact of the 2017 and 2019 government policy on mandatory health insurance for retirees on their health seeking behaviors. It is also important to explore possible long-term impacts of the COVID-19 pandemic on the international retirement migration trends including on the Japanese and other retirees in Thailand.

Background

International retirement migration (IRM), also known as international long-stay tourism, originated as sun-seeking moves from Northern to Southern Europe in 1960s become a global phenomenon [1]. There are many factors promoting IRM. Trade agreements, as seen in the example of North American Free Trade Agreement (NAFTA), contributed to expansion in the number and type of US retirees in Mexico [2]. The rise of internet and air access made IRM much easier. With the global growth of the elderly population IRM has been deemed as a growing industry in recent years [3, 4].

Thailand has emerged as a popular residential destination due to the government's long-stay tourism promotion policy since 2001 as part of the national development strategy [4]. Tourism Authority of Thailand (TAT) defines "Long Stay" as staying in the country for more than 30 days and not for sightseeing activities or working but with a purpose of living with the intention to return to the home countries [5]. Special renewable one-year visas called O-A visa have been widely provided for people aged 50 years and above who fulfill certain financial criteria. Though the exact number of long-stay retirees is unknown due to the variety in types of stay and visa [6, 7], the Immigration Bureau statistics suggest considerable increase in the number of people staying in Thailand over a year using the retirement visas, which reached 68,000 in 2016, up from around 10,000 in 2005 [8, 9].

In order to further promote retirement migration in competition with neighboring countries such as Malaysia and Philippines, Thailand introduced a new 10-year retirement visa (exactly, 5 years and extension for another 5 more years) named O-X visa for more affluent people from 13 Western countries and Japan in 2017 [10]. As evidenced by the selected nations of the new visa, Japan, the world's most aged country, is a primary target of Thai long-stay tourism [13, 15]. Thailand became Japan's second-most popular long-stay destination following Malaysia [11] with at least 3,800 Japanese staying for over a year using the retirement visas in 2016, up from less than 900 in 2005 [8, 9]. The availability of medical services is one of the major pull factors to Thailand [12], in addition to the low cost of living, short flight time from Japan, warm weather, and availability of a long-term visa [13].

Thailand is among top medical destinations of Asia with 62 private hospitals and clinics accredited by Joint Commission International (JCI), while the number is 9 in Singapore and 16 in Malaysia [14]. The deliberate targeting of patients from abroad began after the 1997 financial crisis as private hospitals were losing their domestic patients. The government further strengthened this movement by introducing its medical hub policy in 2003 with an overall strategy to make Thailand an international medical hub in four areas: (1) medical service hub; (2) wellness hub; (3) academic hub, and (4) product hub. In this connection, not only TAT but also Ministry of Public Health (MOPH) takes part in retirement tourism promotion issuing a guideline for developing "Long Stay for Health in Thailand". The MOPH regulation requires all new or extending long-stay visa applicants, either 1-year (since 2019) or 10-year type (since 2017), to show proof of private health insurance with coverage not less than 400,000 baht per year for inpatient care, and not less than 40,000 baht per year for outpatient care [10, 15]. As of July 2020, 14 Thai private insurance companies provide such insurance which can be purchased online at <https://longstay.tgia.org/> [16]. An overseas insurance policy is also acceptable as long as it meets the minimum requirements. One of the remaining challenges is that many of the Thai and overseas private medical insurance companies impose an age limit or medical exclusions.

The expectation on the growing economic benefits from the foreign retirees to healthcare service sector is seen globally. For example, Malaysia also places importance on the provision of healthcare specifically aimed at the elderly and retirees from overseas [17], and there are substantial numbers of potential care-oriented migrants who consider care for themselves in the near future [18]. However, the healthcare use by long-stay retirees in destination countries is not well understood. Previous studies on IRM are dominated by describing and analyzing the motivations for moving, push and pull factors [6, 19–22] or the way of lifestyles adjustment [7]. There are few studies focusing on healthcare issues of long-stay retirees. While increasing in recent years, most such studies are qualitative examining the long-stay retirees' healthcare experience abroad [23–29]. Our recent quantitative study revealed the healthcare service use of Japanese long-stay retirees was limited as they prefer going back to Japan for treatment of chronic or serious diseases [30]. Another quantitative study reported the favorable attitude of Japanese long-stay retirees towards Thai medical services [31]. A qualitative study of Japanese retirees in Malaysia identified that health beliefs, medical symptoms, health insurance, language barriers, voluntary health repatriation to Japan, and psychological support influence healthcare service use among Japanese retirees [26]. To inform IRM promotion strategies, this study explored the barriers and incentives to the use of health services in Thailand by Japanese long-stay retirees.

Methods

Data Collection

An anonymized questionnaire survey of Japanese long-stay retirees aged 50 and older was conducted from January to March 2015 in cooperation with nine Japanese self-help clubs in Bangkok (3), Chiang Mai (3), Chiang Rai (1), and Phuket (2). Study participants were either members of the Japanese clubs or participants to their periodical meetings. On-site, postal or telephone surveys were conducted depending on the club's style of activities and member registration. Exclusion criteria from the analysis were i) new arrivals who started their long-term stay in the past three months; ii) individuals who left more than 30% of the questionnaire blank; or iii) individuals who did not answer the dependent variable. Detailed data collection methods and inclusion criteria are available elsewhere [30].

Variables

Dependent variable is receiving medical treatment including dental services in Thailand in the previous 12 months. It includes both in-patient and out-patient care for diseases or injuries. People who did not receive treatment in Thailand were divided into two groups; those who had treatment only in Japan and those who did not have treatment anywhere. Based on Andersen's behavioral model of health service utilization[32, 33], independent variables were classified to three categories; i) predisposing factors namely age, sex, living place, the number of years living in Thailand, the number of days staying in Thailand in the previous 12 months, and whether they returned to Japan in the previous 12 months, ii) enabling factors including marital status, household composition in Thailand, adjusted annual household income per person, and the Japanese national health insurance (NHI) known as Kokuho, which enable reimbursement for overseas medical expenses to a certain extent and iii) need factors namely Body Mass Index (BMI) calculated by height and weight, self-reported existence of chronic diseases or sequelae, health related Quality of Life (QOL) obtained by the EuroQol-5D-5L as well as receiving medical treatment in Japan in the past 12 months (Fig. 1). Although marital status is commonly deemed as a predisposing factors[33], we take it as enabling factor considering that a spouse, especially Thai spouse, can be a big hand in unaccustomed or inconvenient overseas life. The household income was primary obtained by dividing household income by the square root of the number of member in the household in Thailand [34]. For a married person living alone in Thailand, we divided household income by 2. NHI provides reimbursement of 70 to 90%, in accordance with age and income, of the estimated cost for treatment of the same injury or illness in Japan, or of the amount actually paid overseas if less, for treatments covered by NHI, upon one's request.

Statistical analysis

First, we used descriptive statistics for participants' basic characteristics. Then, two bivariate analysis were conducted between two groups; i) Treatment in Thailand vs Treatment only in Japan, and ii) Treatment in Thailand vs No treatment, with chi-squared test to explore factors related to health services utilization in Thailand. Using variables which were associated with the dependent variables at a p-value of less than 0.20 as well as age and sex, we conducted multiple logistic regression analysis respectively and computed odds ratios for health service use in Thailand. Associations were evaluated using a significance level of p-value less than 0.05. The statistical analysis was performed using SPSS version 22.

Ethics

The study was approved by the ethics committee of the Institute for the Development of Human Research Protections, Thailand. Implied consent was substituted for written consent to assure anonymity of participants by considering their filled and returned questionnaire as consent for participation in the survey; this implied consent principle was explained beforehand. A letter of approval was obtained from the representative of each Japanese club to conduct the research at the club.

Results

Study Participants

The questionnaires were distributed to 341 persons, and 262 responded (77%). Thirty-six persons were excluded in the following order: not deemed as a long-stay retiree (20); new arrivals within three months (2); greater than 30% of the questionnaire left unfilled (3); and missing data of the dependent variable (11). As a result, data from 226 persons (66.3%) were analyzed.

The mean age of the eligible participants living in Bangkok (51), Chiang Mai (138), and the other area (37) was 68.7, with 80.5% of them being male. The mean duration of stay in Thailand was 6.3 years so far and 293 days in the previous 12 months. The mean QOL score was 0.91 out of 1.00 while 38% had a chronic disease or sequelae (Table 1). One hundred and six persons (47%) received medical treatment in Thailand in the previous 12 months, 40 of whom saw a doctor both in Thailand and Japan. The number of participants who experienced inpatient treatment was 23. Out of the remaining 120 persons (53%), 41 received treatment only in Japan, and 79 did not in either country (Fig. 2).

Table 1
Characteristics of the study participants

	n	(%)	
Sex			
Male	182	(80.5)	
Female	44	(19.5)	
Age	68.7	(5.6)	*
Living place			
Bangkok	51	(22.6)	
Chiang Mai	138	(61.1)	
Other	37	(16.4)	
Education			
Bachelor's degree and higher	123	(54.7)	
Others	102	(45.3)	
Years in Thailand	6.3	(4.6)	*
length of stay in Thailand in the past year (days)	293	(76)	*
Returning to Japan			
Yes	173	(78.6)	
No	47	(21.4)	
Marital status			
Married with Thai	60	(26.7)	
Married with Non-Thai	109	(48.4)	
Single	56	(24.9)	
Household composition in Thailand			
Living alone	70	(32.0)	
Living with someone	149	(68.0)	
Adjusted annual household income per person (JPY 10000)	215	(119)	*
National Health Insurance			
Covered	99	(44.2)	
Not	125	(55.8)	
BMI			
Normal range	143	(63.6)	
Underweight /Overweight	82	(36.4)	
QOL: EQ-5D-5L index value	0.91	(0.13)	*

*Mean (SD)

	n	(%)
Chronic disease or sequelae		
Have	78	(38.4)
Not	125	(61.6)
*Mean (SD)		

Factors Associated With Use Of Health Services In Thailand

The two bivariate analysis (Table 2) showed several factors possibly affecting health seeking behavior. Among retirees who received medical treatment in the previous 12 months, receiving treatment in Thailand was significantly associated with sex, years of long-stay, duration of stay in Thailand in the past year, returned to Japan or not, marital status, and covered by national health insurance or not. Household composition in Thailand and with or without chronic disease or sequelae also showed p-values less than 0.2. Retirees who did not get medical treatment in the previous 12 months were significantly different from those who treated in Thailand in years of long-stay, QOL, and chronic disease and sequelae, and in national health insurance at p-value less than 0.2. Years in Thailand was the only one factor commonly detected in the two analysis. The retirees who stayed in Thailand less than five years were less likely to receive treatment in Thailand (33.7%) than those staying more than five years (56.5%). Income per person was not related to the medical service use in either group. Since the respondent rate to the income question was relatively low (71.7%), we additionally analyzed a data with assigning mean values by education level to non-respondents, but the result remained insignificant in both groups.

Table 2
Bivariate analysis of factors associated with healthcare service use

		Treatment in Thailand		Treatment only in Japan		No treatment			
		n	(%)	n		p-value	n	(%)	p-value
		106	(46.9)	41	(18.1)		79	(35.0)	
Predisposing	Sex								
	Male	89	(48.9)	27	(14.8)	0.016 *	66	(36.3)	0.939
	Female	17	(38.6)	14	(31.8)		13	(29.5)	
	Age								
	< 70	58	(46.8)	20	(16.1)	0.482	46	(37.1)	0.686
	>=70	47	(46.5)	21	(20.8)		33	(32.7)	
	Living place								
	Bangkok	25	(49.0)	10	(19.6)	0.474	16	(31.4)	0.232
	Chiang Mai	59	(42.8)	26	(18.8)		53	(38.4)	
	Other	22	(59.5)	5	(13.5)		10	(27.0)	
	Education								
	Bachelor's degree +	61	(49.6)	23	(18.7)	0.873	39	(31.7)	0.310
	Others	45	(44.1)	18	(17.6)		39	(38.2)	
	Years in Thailand								
	< 5 years	30	(33.7)	22	(24.7)	0.003 **	37	(41.6)	0.007 **
	>=5 years	74	(56.5)	18	(13.7)		39	(29.8)	
Length of stay in Thailand in the past year									
< 300days	25	(37.9)	29	(43.9)	< 0.001 **	12	(18.2)	0.217	
>=300days	76	(51.7)	12	(8.2)		59	(40.1)		
Returning to Japan									
Yes	79	(45.7)	39	(22.5)	0.002 **	55	(31.8)	0.151 †	
No	21	(46.7)	0	(0.0)		24	(53.3)		
Enabling	Marital status								
	Married with Thai	37	(61.7)	4	(6.7)	0.011 *	19	(31.7)	0.261
	Married with Non-Thai	46	(42.2)	25	(22.9)		38	(34.9)	
	Single	23	(41.1)	11	(19.6)		22	(39.3)	
Household composition in Thailand									

†p < 0.2, *p < 0.05, **p < 0.01

		Treatment in Thailand		Treatment only in Japan			No treatment			
	Living alone	29	(41.4)	18	(25.7)	0.059	†	23	(32.9)	0.834
	Living with someone	73	(49.0)	22	(14.8)			54	(36.2)	
	Adjusted annual household income per person (JPY)									
	< 2 million	42	(47.2)	12	(13.5)	0.252		35	(39.3)	0.260
	>=2 million	36	(49.3)	17	(23.3)			20	(27.4)	
	National Health Insurance									
	Covered	43	(43.4)	31	(31.3)	< 0.001	**	25	(25.3)	0.179 †
	Not	61	(48.8)	10	(8.0)			54	(43.2)	
Need	BMI									
	Normal range	67	(46.9)	27	(18.9)	0.629		49	(34.3)	0.869
	Under-/Overweight	39	(47.6)	13	(15.9)			30	(36.6)	
	QOL: EQ-5D-5L index value									
	< 1.00	46	(54.8)	18	(21.4)	0.897		20	(23.8)	0.010 *
	1.00	59	(42.1)	22	(15.7)			59	(42.1)	
	Chronic disease or sequelae									
	Have	54	(69.2)	17	(21.8)	0.161	†	7	(9.0)	< 0.001 **
	Not	43	(34.4)	23	(18.4)			59	(47.2)	
†p < 0.2, *p < 0.05, **p < 0.01										

The multivariate analysis using the above factors (Table 3) identified five factors related to medical service use of Japanese retirees in Thailand. Years in Thailand was the only common factor in the two groups. Retirees who stayed in Thailand less than five years were more likely to receive treatment only in Japan (OR = 5.34, 95% CI = 1.67–17.12) or not to receive any treatment (OR = 2.55, 95% CI = 1.08–6.02) compared to veteran long-stayers. Among retirees who received medical treatment in the previous 12 months, two more significant factors were observed. The retirees who stayed less than 300 days (OR = 5.62; 95% CI = 2.08–15.20) and who were covered by Japan's national health insurance (OR = 4.89; 95% CI = 1.58–15.14) were more likely to receive medical treatment only in Japan. On the other hand, the retirees who did not go back to Japan in the previous year (OR = 3.33, 95% CI = 1.21–9.18) and those without chronic diseases (OR = 15.29, 95% CI = 4.90-47.68) were more likely to stay without any medical treatment.

Table 3
Odds Ratios of healthcare service use in Thailand from multiple logistic regression analysis

		vs Treatment only in Japan			vs No treatment		
		OR	(95% CI)		OR	(95% CI)	
Predisposing	Sex						
	Male	1.00			1.00		
	Female	0.49	(0.16	- 1.54)	1.24	(0.42	- 3.69)
	Age						
	< 70	1.00			1.00		
	>=70	0.37	(0.13	- 1.09)	0.78	(0.33	- 1.83)
	Years in Thailand						
	< 5 years	1.00			1.00		
	≥ 5 years	5.34	(1.67	- 17.12)	**	2.55	(1.08 - 6.02) *
	Length of stay in Thailand in the past year						
	< 300days	1.00			-		
	>=300days	5.62	(2.08	- 15.20)	**	-	
	Returning to Japan						
No	-			1.00			
Yes	-			3.33	(1.21	- 9.18) *	
Enabling	Marital status						
	Married with Thai	1.00			-		
	Married with Non-Thai	0.65	(0.15	- 2.82)	-		
	Single	0.51	(0.08	- 3.27)	-		
	Household composition in Thailand						
	Living alone	1.00			-		
	Living with someone	1.23	(0.36	- 4.18)	-		
	National Health Insurance						
	Not covered	1.00			1.00		
Covered	0.20	(0.07	- 0.63)	**	1.95	(0.86 - 4.37)	
Need	QOL: EQ-5D-5L index value						
	< 1.00	-			1.00		
	1.00	-			1.09	(0.40 - 2.98)	

*p < 0.05, **p < 0.01

	vs Treatment only in Japan	vs No treatment
Chronic disease or sequelae		
Not have	1.00	1.00
Have	1.30 (0.48 - 3.53)	15.29 (4.90 - 47.68) **
*p < 0.05, **p < 0.01		

Discussions

Our previous analysis revealed that Japanese retirees' use of health services in Thailand was infrequent and primarily for non-serious conditions [30]. This study provides additional information as to individual factors of all the categories -predisposing, enabling and need factor - affecting their health seeking behavior.

It is of note that the strongest factor of not seeking medical treatment in the past 12 months was not some barriers but no existence of chronic disease or sequelae. On the other hand, there were no significant difference in need factors between retirees who had treatment in Thailand and only in Japan.

The interesting finding is that retirees staying in Thailand longer years are more likely to see a doctor in Thailand. As we have adjusted health needs factors in the multivariate analysis, this phenomenon does not signify the longer you stay in Thailand, the more subject to diseases. Also, longer stay in Thailand does not mean older age as we have adjusted age. Instead, it suggests that longer stay increases trust in Thai medical services and lowers the psychological barrier. Naturally, the longer one stays, the more chances one might have to get to know a good doctor or a hospital by word of mouth, and more importantly, from one's own experiences. A study suggested trust in foreign healthcare was built on experiential encounters with specific institutions; specifically, interpersonal qualities of practitioners (respect for older people, empathy and reciprocity) and clean, modern and efficient facilities [36]. Medical facilities that most of the Japanese go to are JCI accredited and considered to meet the criteria above. Actually, half of Japanese long-staying elderly had rated medical services provided in Thailand as high quality and comfortable, while less than 10% rated low quality and uncomformable [31]. Such good experiences engender trust in and remove psychological barriers. On the other hand, it would appear that relative newcomers tend to hesitate to go to medical facilities in doubt of their quality. Further promotion of trust building by providing necessary information in terms of the quality of care, cost and support is necessary. More specifically, improving websites of medical facilities; for example reflecting patient's preferences by data mining[37], or development of a system to evaluate clinical outcomes of each institution by a third party would be worthy of consideration.

The study observed retirees who stayed shorter periods in Thailand in the past 12 months were more likely to receive medical treatment only in Japan in the same period as a matter of course. This could be reverse causation, i.e. because they went to Japan for treatment, they stay Thailand shorter. This was revealed by our previous study [30] as well as a study in Malaysia [26] which indicated that voluntary health repatriation to Japan would reduce medical service use in a retirement place.

On the other hand, retirees who did not return to Japan were less likely to use healthcare services in Thailand (and of course in Japan). We assume this factor substitutes whether covered by travelers' insurance to some extent, which is duration specific; generally valid for a maximum of one year, commonly for three months, from initiation of travel from Japan. In Thailand, private medical care costs are often perceived to be more expensive than the fixed medical fees under Japan's universal health insurance scheme [31, 35], and travelers' insurance is actually the most common medical insurance the participants used [30]. In addition, the retirees covered by Japan's national health insurance tended to get medical treatment only in Japan. This also indicates health insurance coverage is an important factor of one's cross-border health seeking behavior. Thailand has recently imposed mandatory health insurance coverage on retirees to get or renew retirement visa. Further studies are required to see the impact of the new regulation on their health seeking behaviors.

Limitations

Firstly, we recognize the small sample size for logistic regression analysis. However, even analysis with forward stepwise selection using small number of variables showed the same factors.

Another limitation is that we recruited participants through Japanese self-help clubs, indicating that our sample is biased towards retirees who have social ties in Japanese community in Thailand to a greater or lesser extent. This selection bias, however, does not act in the direction of overestimation of the difference between those who used medical services and those not. Influence of years staying in Thailand on medical service use would be rather bigger among the retirees who have little social support in Thailand.

We realize the possibility of recall bias related to the dependent variable, i.e. whether study participants had seen doctors in the past 12 months or not, but it is negligible since it is unlikely that the answers leaned to only one direction. Another limitation on the dependent variable is that it does not reflect timing or times of visits to a doctor. Whether there was delay or hesitation in seeking medical attention was unknown even among the outcome group.

Conclusion

For foreign retirees, access to quality health care in retirement destinations is an important element in their successful overseas retirement life and well-being, and a business opportunity for healthcare sector of destination countries. Thailand promotes “long stay for health” by combining the long stay tourism with the medical hub policy.

This is the first quantitative study investigating factors affecting healthcare service use in Thailand among retirees from their actual health seeking behavior. Our study observed the favorable situation in which health services are utilized based on their health needs. On the other hand, retirees with relatively short years of stay in Thailand were found to be less likely to use health services in Thailand. Thai government, including both tourism and public health authorities, needs to run their long-stay tourism promotion with transparent medical quality and pricing information of each medical facility to promote the trust in Thai medical services.

The study suggests health insurance coverage home and abroad is an important factor of one's cross-border health seeking behavior. Further studies are required to see the impact of the mandatory health insurance that Thailand has recently imposed on retirees on their health seeking behaviors. Considering that health seeking behavior abroad depends on the healthcare system and environment of one's country of origin, the further research should extend to retirees from various countries. It is also important to explore possible long-term impacts of the COVID-19 pandemic on the volume and composition of IRM and in particular the Japanese and other retirees in Thailand.

Declarations

Ethics approval and consent to participate

The study was approved by the Human Research Ethics committee of the Institute for the Development of Human Research Protections, Thailand. A letter of approval was obtained from the representative of each Japanese club instead of written consent from individual participants to assure anonymity.

Consent for publication

Not applicable.

Availability of data and material

The data will not be shared to protect the privacy of the study participants in accordance with our engagement with the study participants as well as the Human Research Ethics committee.

Competing interest

The authors have no conflict of interest relevant to the content of this study.

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Authors' contributions

YM and CA designed the study. YM collected and analyzed data and wrote the first draft of the manuscript. YM, CA, and LV discussed the findings and revised each version of the manuscript. All authors reviewed and approved the final manuscript.

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Figures

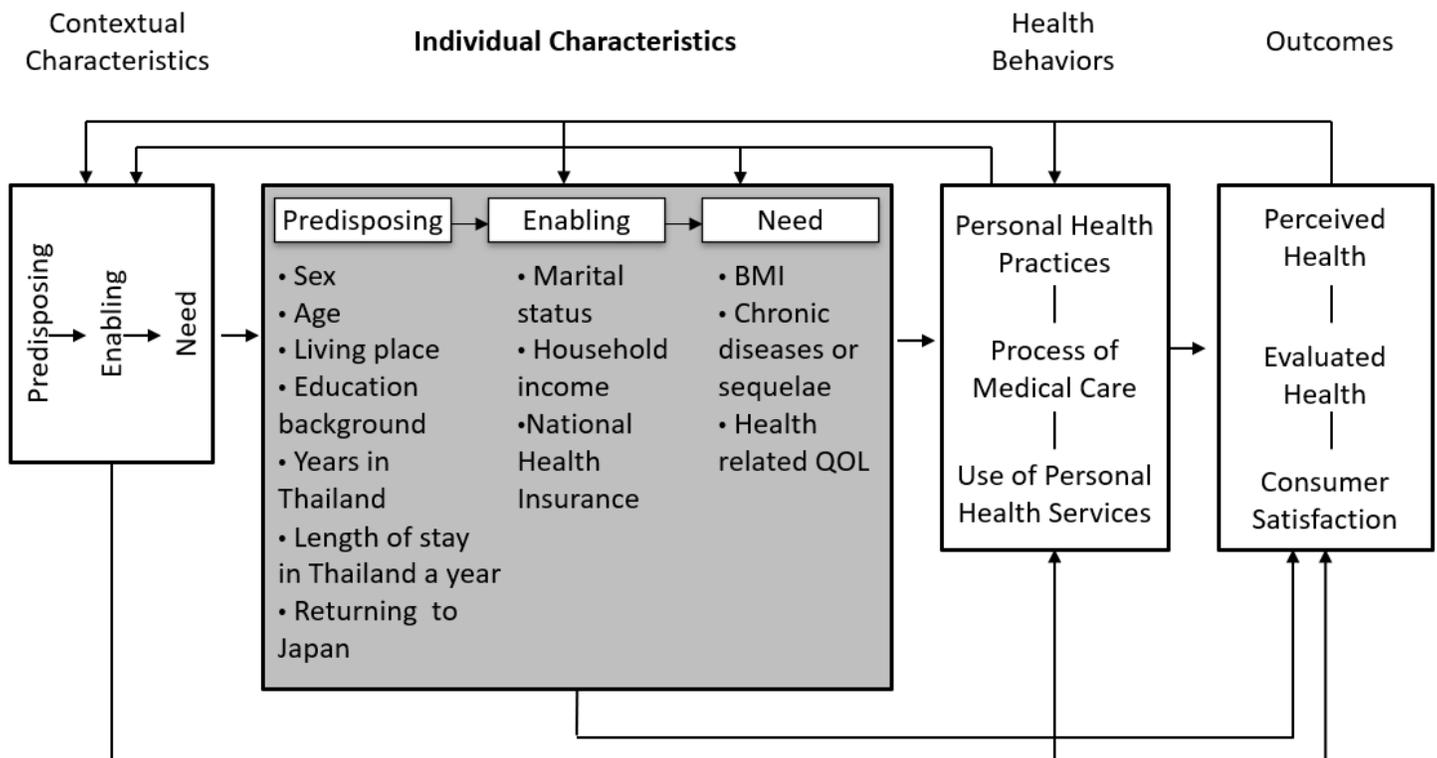


Figure 1

Variables in the research based on Andersen's Behavior Model

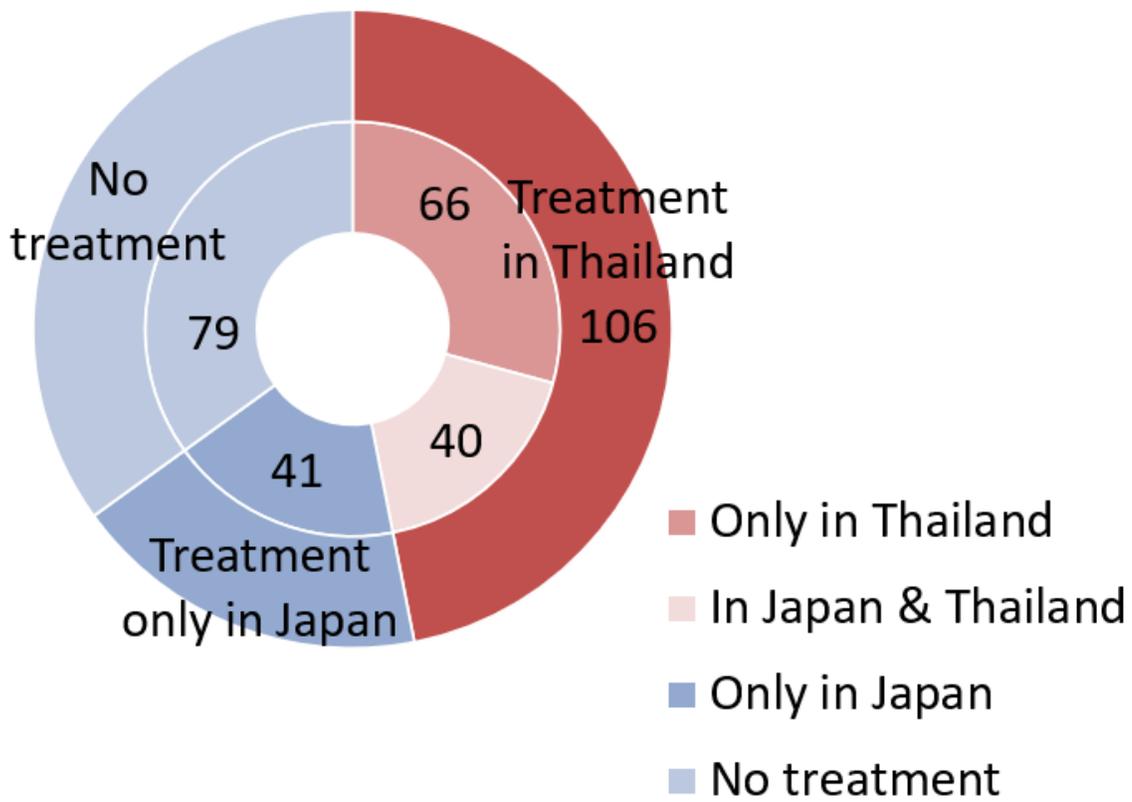


Figure 2

Distribution of healthcare service use of the participants