

ORIGINAL ARTICLES

## The health seeking behavior of the elderly in a coastal town in Vietnam and some related factors in 2023

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### ABSTRACT

**Objectives:** The purpose of this study is to describe the current state of health service utilization in the elderly, as well as the factors that influence it.

**Methods:** The study design is a cross-sectional study. We studied 240 elderly people living in Think Long town, Hai Hau district, Nam Dinh province from January to March 2023. Using a reference questionnaire from previous studies and a convenience sampling method.

**Results:** 31.3% of elderly people used regular health check-ups. In the 4 weeks before the survey, 25.8% of the elderly were sick/diseased. Only 22.6% of elderly people had medical examinations and treatment, and 77.4% of elderly people did not go to medical examinations and treatment. 50% of elderly people chose to go to private medical facilities. Gender and education level related to the use of medical examination and treatment services among the elderly. Female are more likely to seek medical care than male (OR = 4.86; 95% CI = 1.01 - 23.38), elderly people with a high school or higher educations were less likely to seek medical care than elderly people with lower secondary school education (OR = 0.15; 95% CI = 0.03 - 0.89).

**Conclusions:** The elderly need to be proactive in monitoring their health and having regular check-ups.

**Keywords:** Elderly; health-seeking behavior; coastal town; healthcare, health services.

## INTRODUCTION

Vietnam is one of the countries with the fastest population aging in the world. In 2019, people aged 60 and over accounted for 11.9% of the total population, and by 2050, this figure will rise to more than 25%. By 2036, Vietnam's population will begin to transition from a "aging" society to a "old" one (1).

Changes in disease patterns, infrastructure, social security services, and the need for elderly support services are all consequences of population aging. Furthermore, while other groups tend to decline, the proportion

of elderly people living alone or with only their spouse is increasing. In terms of health, there can be a noticeable difference in the rate of challenges according to gender, age (the older the person, especially for the elderly group from 80 years old), and health status (women experience more illnesses than men) (2) by ethnicity (the utilization of medical examination and treatment services varies by ethnicity) (3) and by region (elderly residents in rural areas face more challenges than those in urban areas) (4).

In Vietnam, studies have been conducted on the use of medical care services. Research



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by author Nguyen Dang Vung on the elderly in Hanoi in 2015 had shown that when the elderly get sick, they went to medical care at district hospitals with the highest proportion (45.8%), and 27.1% went to medical care at the commune health station, 20.1% visit a private health facility; the main reason the elderly went to the district hospital for medical care is that they have a health insurance card there, accounting for 94.2% (5).

Another 2015 study on the elderly in two communes in Kien Xuong district, Thai Binh, Vietnam found that 87.2% went for medical examination and treatment, 66.5% chose a district hospital, and only 3.7% went to a private health facility (6). According to a 2019 study assessing the status and health care of the elderly in Thua Thien Hue, 89.2% of the elderly used health care services in the previous three years, with public hospitals and commune health stations being the most commonly used health care facilities (54.1% and 22.7%, respectively), private clinics accounting for only 4.0%, and private hospitals for 2.9% (7).

When elderly people become ill, they have a right to medical evaluation, treatment, and care. Children and grandchildren frequently lack the time required to care for their grandparents and parents, making the elderly's healthcare needs even more difficult to meet, especially in today's rapidly developing society. Some factors related to the status of health service use of the elderly have been identified, such as distance to health facilities (8), quality of medical examination and treatment services (9), economic conditions (10), health insurance (8), gender (11) and education level (8).

Thinh Long is a coastal town in Hai Hau District, Nam Dinh, with over 1600 elderly residents. With the economy still facing many challenges and few health care services for the elderly (12). We conducted a study "*The*

*Health Seeking Behavior of the Elderly in a Coastal Town in Vietnam and some related factors 2023*" with the following objectives:

- (1) Describe the health status and use of medical examination and treatment services in the 4 weeks among the elderly in Thinh Long town, Hai Hau district, Nam Dinh province in 2023.
- (2) Analyze some factors related to the use of medical examination and treatment services among the elderly in Thinh Long town, Hai Hau District, Nam Dinh Province in 2023.

## METHODS

**Research design:** The research design is a cross-sectional study.

**Research site and time:** We conducted a study on elderly people living in Thinh Long town, Hai Hau district, Nam Dinh province from January to March 2023.

**Sample size and sampling method:** Apply the formula for calculating sample size to estimate a proportion

$$n = Z^2_{(1-\alpha/2)} \frac{p(1-p)}{(p\varepsilon)^2}$$

In which,  $p=0.548$  percentage of elderly people using medical examination and treatment services when they are sick according to research by author Pham Phuong Lien carried out in 2015;(8) The accepted margin of error:  $\varepsilon = 0.12$  (due to limited research resources).. The minimum sample size to be collected is 221 older people. In fact, the study surveyed 240 elderly by convenient sampling method.

## Research variables

Dependent variable: Got medical examination and treatment services.

Independent variable: Gender, Age groups, Education levels, Still working, Living

situation, Marital status, Economic status.

**Data collection:** The questionnaire has been verified through research conducted by Pham Phuong Lien conducting an investigation on the status of using medical examination and treatment services and some related factors among the elderly in Hoang Mai district, Hanoi, Vietnam in 2015 (8).

The researcher contacted the Think Long elderly association, and interviewed at monthly Elderly meetings from January to March 2023.

**Data analysis:** Data analysis using statistical software Stata 16.0 and using descriptive statistics (calculation of frequencies, proportions, mean...), determine the related factor by the odds ratio (OR) and 95% confidence interval (95% CI)

**Ethical approval:** This study was approved by the Ethical Committee of the Hanoi Medical University (Decision 1397/QĐ-ĐHYHN) in December 2022.

## RESULTS

**Table 1. Demographic characteristics of research subjects (n=240)**

	Demographic characteristics	Frequency	Percentage (%)
<b>Gender</b>	Male	87	36.3
	Female	153	63.7
<b>Age groups</b>	From 60 to 69 years old	175	72.9
	From 70 to 79 years old	50	20.8
	80 Years old and up	15	6.3
<b>Education</b>	Can't read or write	5	2.1
	Primary school	67	27.9
	Middle school	99	41.3
	High school	69	28.7
<b>Working</b>	Yes	169	70.4
	No	71	29.6
<b>Living situation</b>	Live alone	18	7.5
	Live with spouse	173	72.1
	Live with children and grandchildren	37	15.4
	Living with both spouse and children	8	3.3
	Live with relatives	4	1.7
<b>Status Marriage</b>	Not married	11	4.6
	Having a spouse	193	80.4
	Widow	33	13.8
	Divorce	2	0.8
	Separated	1	0.4
<b>Economic status</b>	Low income	45	18.7
	Middle income	184	76.7
	High income	11	4.6

Table 1 shows that the majority of study participants (63.7%) are female, with men accounting for only 36.3%. the majority of people (72.9%) are aged 60 to 69 years old. the majority of the elderly (41.3%) have completed lower secondary education, followed by high school (28.7%) and primary school (27.9%); only 2.1% of the elderly are unable to read or write.

During the study, the majority of the elderly (70.4%) were still working. The elderly's living situation: 72.1% of the elderly live with their spouse, 15.4% with their children and grandchildren, 7.5% alone, and 3.3% with both spouses and children, descendants, and 1.7% with relatives.

**Table 2. The situation of illness/disease among the elderly in the 4 weeks before the survey (n=240)**

Characteristics	Frequency (%)
<b>Get sick in the last four weeks (n = 240)</b>	
Yes	62 (25.8)
No	178 (74.2)
<b>Symptoms/diseases acquired by older people in the four weeks before the survey (n=62)</b>	
Flu, cough, fever, headache	49 (79.0)
Abdominal pain, diarrhea	4 (6.5)
Heart rate, blood pressure	6 (9.7)
Muscles - bones - joints	14 (22.6)
Other	2 (3.2)

Table 2 shows that 25.8% of the elderly were sick in the four weeks before the survey, which is lower than the 74.2% rate for the elderly who were not ill. In the four weeks preceding the survey, 79% of the elderly had colds, coughs, fevers, and headaches.

Musculoskeletal symptoms/diseases accounted for 22.6%, while cardiovascular and blood pressure accounted for 9.7%. 6.5% of the elderly suffered from abdominal pain and diarrhea, while 3.2% experienced other symptoms/diseases.

**Table 3. Proportion of medical examination and treatment when sick/illness of the elderly in the past 4 weeks**

Characteristics	n (%)
<b>Get examined and treated (n=62)</b>	
Yes	14 (22.6)
No	48 (77.4)
<b>Medical facilities where the elderly go for an examination and treatment (n=14)</b>	
Private healthcare	7 (50.0)
Commune health station	2 (14.3)
District hospital	3 (21.5)

Characteristics	n (%)
Provincial hospital	1 (7.1)
Central hospital	1 (7.1)
<b>Reasons why older people did't get medical examined and treated (n=48)</b>	
Lack of means of transportation	2 (4.2)
Mild illness	10 (20.8)
Self-treatment in folkways	2 (4.2)
Buy your own medicine	36 (75.0)
Someone at home is a doctor	4 (8.3)

Table 3 shows that, in the four weeks before the survey, only 22.6% of 62 elderly people who were sick received medical treatment, which was significantly lower than the 77.4% who did not receive medical care.

Among the elderly who went for medical examination and treatment when sick in the four weeks preceding the survey, the majority chose to go to a private health facility (50%),

followed by the district hospital (21.5%), the commune health station (14.3%), the Provincial Hospital (7.1%), and the Central Hospital (7.1%). The primary reason older people did not seek medical care when they were ill in the four weeks preceding the survey was that they purchased their own medicine (75.0%) or believed their illness was minor (20.8%).

**Table 4. Some factors related to the used of medical examination and treatment services in the past 4 weeks among the elderly (n=62)**

Demographic characteristics	Used of medical examination and treatment services		OR (95%CI)	OR adj* (95%CI)*	
	Yes n (%)	No n (%)			
<b>Gender</b>	Male	5 (35.7)	8 (16.7)	1	1
	Female	9 (64.3)	40 (83.3)	2.78 (0.73-10.51)	<b>4.86 (1.01-23.38)</b>
<b>Age groups</b>	60 - 69 years old	7 (50.0)	33 (68.8)	1	1
	Age 70 and up	7 (50.0)	15 (31.2)	0.45 (0.14-1.53)	0.67 (0.13-3.44)
<b>Education Level</b>	Middle school and below	10 (71.4)	43 (89.6)	1	1
	High school and above	4 (28.6)	5 (10.4)	0.29 (0.07-1.28)	<b>0.15 (0.03-0.89)</b>

Demographic characteristics		Used of medical examination and treatment services		OR (95%CI)	OR adj* (95%CI)*
		Yes n (%)	No n (%)		
Still working	Yes	7 (50.0)	37 (77.1)	1	1
	No	7 (50.0)	11 (22.9)	0.3 (0.09-1.03)	0.37 (0.08-1.71)
Living situation	Live alone	2 (14.3)	3 (6.25)	1	1
	Live with others	12 (85.7)	45 (93.75)	2.5 (0.37-16.7)	1.59 (0.12-21.3)
Marital status	Being married, Not married	8 (57.1)	37 (77.1)	1	1
	Separation, Divorce, Widow	6 (42.9)	11 (22.9)	0.4 (0.11-1.39)	0.41 (0.07-2.57)
Economic status	Poor	3 (21.4)	12 (25.0)	1	1
	Just Enough or Fairly Well	11 (78.6)	36 (75.0)	0.82 (0.19-3.43)	0.67 (0.13-3.52)

Table 4 analyzes several factors related to the use of medical examination and treatment services in the last four weeks in the elderly, demonstrating that Gender and education level are associated with the likelihood of using medical examination and treatment services in four weeks. Women are more likely than men to seek medical treatment (OR = 4.86; 95% CI = 1.01-23.38). Elderly people with a high school diploma or higher are less likely to seek medical attention and treatment than older people with a lower secondary education (OR = 0.15; 95% CI = 0.03-0.89).

## DISCUSSION

The study described the current situation of seeking health services among the elderly and some related factors in a coastal town. In this study, 31.3% of the participants had regular health examinations. In Southwestern

Nigeria, Stephen Ilesanmi Olayinka's study found that 54.8% of the elderly receive routine health checks(9) ; this rate is lower than other research by Xi Sun in China (63.5%),(10) by Sabnam Acharya in Nepal (70%).(11)

In our study, 32% of the elderly have a health checkup once a month, which is lower than the findings of Sowmya Bhat's study on the use of health care services in the rural elderly.(13) Older people tend to self-medicate when they are ill or sick (75%), and they also believe that a mild illness will go away on its own (20.8%) very quickly. This could be explained by the fact that there are more pharmacies than public health facilities in the study area, giving the elderly easy access to them. In the three months prior to the survey, 33.7% of people aged 19 to 90 in Vietnam's northern mountainous regions were self-treated, with headaches and fever accounting for the majority of cases (63.8% and 32.8%, respectively).(14)

Elderly people who are ill or have been ill within the last four weeks frequently receive medical care. In this study, the elderly (50%) are the most likely to seek routine medical care at private health facilities, followed by district hospitals (21.5%) and commune CHSs (14.3%). This result is consistent with the findings of Ekta Gupta's study, which revealed that the majority of older people (40%) chose private health care, followed by the majority (37.7%) who chose public health care, and the remaining 10.3% who purchased medication for treatment.(15) Our findings, which differ from Annamika Hakmaosa's research in Kamrup, showed that the majority of the elderly prefer public hospitals (51.5%), followed by private hospitals (25.7%), pharmacies (22.1%), and folk healers (0.7%).(16) Research by Dhananjay Kumar shows that the elderly choose public health care with the highest proportion 61.9%, self-medication is 20.9% and private health care accounts for 17.4%.(17) In a study by Cihad D'undar in Turkey, older people chose public hospitals (38%) over private hospitals (12%).(18)

According to research findings, elderly females use medical examination and treatment services more frequently than elderly males (OR = 4.86; 95% CI = 1.01-23.38). This is understandable given that women are typically more concerned with their health than men. The concept of Vietnamese people frequently upholds the role of women in housework and family management; women are considered keepers of the "key box," arranging and organizing family life according to the Due to their family situation and the needs of the members, women are also considered the "main responsible person" for ensuring the health of family members...

Ashley E. Thomson et al. found that there are gender differences in seeking health care services, with women using more than men. (19) However, Thang Pham's study on elderly

people in rural Vietnam found no relationship between gender and use of medical examination and treatment services.(20)

This study found that the elderly with a high school diploma or higher are less likely to seek medical care than the elderly with a lower secondary education. A study of elderly without family in Shandong, China, found that the rate of using medical services was higher among older people with lower education and those from rural areas.(21) This could be explained by the fact that people with higher education have more knowledge about health and disease prevention for themselves.

The study had some limitations: First, there was a risk of recall bias when asking a participants about things that happened in the previous four weeks. The second limitation was convenient sampling. Finally, many factors influence health-seeking behavior, including accessibility and the quality of health-care services.

## CONCLUSION

The percentage of older people who have regular health check-ups is still low (31.3%) and the percentage of older people who use medical examination and treatment services when they are sick/ill is also very low (22.6%), which has a great impact. to the early detection, treatment, and rehabilitation of the elderly's health. Gender and education level are related to the status of using medical examination and treatment services in 4 weeks passed of elderly. The elderly need to be proactive in monitoring their health and having regular check-ups.

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