Chapter **4**

Health Status of Older Persons

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Health Status of Older Persons

Tuo-Yu Chen and Yasuhiko Saito

One aim of the Longitudinal Study of Ageing and Health in Viet Nam (LSAHV) is to update the description of old persons (OPs), focusing on their health and well-being. This chapter explores the dimensions of health status, including self-rated health, diagnosed illnesses, oral health, and other experiences that affect mental health, such as sleep quality, depression, amongst others. The findings will not only help in understanding the health status of OPs but also serve as the evidence base for a follow-up survey in 2020.

Self-rated Health

The LSAHV assessed individuals' self-reported current and past health. The survey asked OPs to describe their state of health now and from birth to age 16. Responses ranged from 1 (very healthy) to 5 (very unhealthy).

Most OPs consider their current health average and past health healthier than average (Table 4.1). More women than men rate themselves as being of average health or unhealthy. A similar trend was observed when comparing their current health with their health up to 16 years. However, only when comparing past health between sex reached a significant level. There was a trend between poor current health and older age, but not poor past health and older age. The comparisons of current or past health with age did not reach significant level.

Table 4.1. Self-assessed Health by Sex and age

Self-assessed health	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Current								
Very healthy	3.1	0.7		2.4	0.9	0.5		1.8
Healthier than average	26.9	21.2		29.9	16.4	8.8		23.8
Of average health	47.0	48.3	n.s.	47.3	51.0	43.6	n.s.	47.7
Somewhat unhealthy	19.9	25.5		18.5	26.4	37.7		23.0
Very unhealthy	3.0	4.1		1.9	5.3	9.0		3.6
N	2,357	2,987		2,525	1,829	990		5,344
While growing up (from birth to age 16)								
Very healthy	39.9	27.5		35.2	28.5	31.0		33.0
Healthier than average	45.8	55.3		50.6	54.4	47.5		51.1
Of average health	12.6	14.4	*	12.7	14.4	16.7	n.s.	13.6
Somewhat unhealthy	1.1	1.8		1.2	1.4	3.2		1.5
Very unhealthy	0.3	0.6		0.08	1.1	1.1		0.5
Not Sure	0.3	0.4		0.3	0.3	0.6		0.4
N	2,357	2,988		2,526	1,829	990		5,345

Sig = Statistical significance, * p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Diagnosed Illnesses

The survey asked about two groups of diseases (Table 4.2). Group-1 diseases are not life-threatening and are recognisable by respondents themselves. Group-2 diseases require a medical diagnosis. We asked the OPs whether a doctor had told them that they had any of the diseases from this group. In another set of question, we asked if OPs had ever had a heart attack and if so, what age they had it and if they are taking any medications for a heart condition.

The most common diseases are arthritis, neuralgia, or rheumatism, and the least common tuberculosis (Table 4.2). More women experience group-1 diseases than men. For group-2 diseases, more men reported cerebrovascular disease, respiratory disease, renal or urinary tract ailments, tuberculosis, liver (or gallbladder) disease, and cancer. More women experience diabetes, digestive illness, osteoporosis, glaucoma, and slipped discs. None of the comparisons, however, reach a significant level. No significant age differences are observed amongst those with group-1 diseases. Older age is significantly related to the group-2 diseases of high blood pressure and respiratory illness.

Table 4.2. Diagnosed Illnesses by Sex and Age

Diagnosed Illnesses	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
GROUP 1								
Arthritis, neuralgia or rheumatism	37.7	51.8	n.s.	43.3	46.3	54.3	n.s.	45.8
Chronic back pain	24.9	34.4	n.s.	27.6	31.4	38.6	n.s.	30.3
Cataracts	10.0	14.0	n.s.	7.8	15.6	24.0	n.s.	12.3
Fractures of the hip, thigh and pelvis/ broken hip	3.1	3.7	n.s.	2.9	4.7	3.5	n.s.	3.4
Other fractures	5.5	6.8	n.s.	6.0	6.8	6.2	n.s.	6.2
GROUP 2								
High blood pressure	38.4	42.8	n.s.	34.7	49.9	49.5	*	40.9
Angina/myocardial infarction, etc.	10.8	13.2	n.s.	11.6	13.7	11.9	n.s.	12.2
Cerebrovascular disease (hemorrhage, infarction, stroke, etc.)	6.0	4.3	n.s.	4.3	6.0	6.2	n.s.	5.0
Diabetes	8.1	9.8	n.s.	9.1	10.8	6.5	n.s.	9.1
Respiratory illness (chronic, such as asthma, emphysema)	8.7	6.1	n.s.	5.5	8.0	12.1	*	7.2
Digestive illness (stomach or intestinal)	17.5	19.5	n.s.	17.9	22.0	16.3	n.s.	18.6
Renal or urinary tract ailments/kidney	6.6	4.4	n.s.	5.3	5.0	6.0	n.s.	5.3
Osteoporosis	5.5	12.2	n.s.	8.5	10.5	10.6	n.s.	9.3
Tuberculosis	1.6	0.5	n.s.	1.0	1.0	1.0	n.s.	1.0
Ailments of the liver or gallbladder	4.0	3.8	n.s.	4.6	3.2	2.2	n.s.	3.9
Glaucoma	2.0	2.6	n.s.	2.1	2.4	3.5	n.s.	2.4
Cancer	1.9	1.5	n.s.	2.0	1.5	0.9	n.s.	1.7
Slipped disc	4.7	6.2	n.s.	5.7	5.5	4.9	n.s.	5.5
N	2,570	3,480		2,638	2,004	1,408		6,050

Sig = Statistical significance, $*$ p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

About 10% of the OPs have had a heart attack (Table 4.3). No sex differences are observed in the incidence of heart attack, age at time of heart attack, and utilisation of heart attack medications. The mean age at time of heart attack was significantly older for older age groups.

Table 4.3. Experience of Heart Attack by Sex and Age

Experience of Heart Attack	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Experience of Heart Attack	7.6	11.1	n.s.	9.3	10.7	9.1	n.s.	9.6
N	2,564	3,471		2,634	1,999	1,402		6,035
Mean age experienced heart attack	64.73	64.08	n.s.	56.74	66.17	73.58	***	64.31
N	152	278		158	179	93		430
Currently taking medicine for heart condition	69.5	71.0	n.s.	65.3	79.7	74.4	n.s.	70.5
N	184	365		194	216	139		549

Sig = Statistical significance, *** p < 0.001, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Oral Health

The LSAHV identified the OPs' number of natural teeth and number of paired teeth (upper and lower teeth). We asked the OPs if they had dentures and if so, if they used them whilst eating and if they were satisfied with them.

Table 4.4. Oral Health by Sex and Age

Oral Health	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean number of natural teeth	22.95	21.75	n.s.	24.52	20.95	16.08	*	22.27
N	1,953	2,619		2,014	1,520	1,038		4,572
% with no teeth	3.8	5.0	n.s.	2.2	5.0	11.8	*	4.5
N	1,953	2,619		2,014	1,520	1,038		4,572
Mean number of functioning teeth	10.19	9.47	n.s.	11.12	8.79	6.41	*	9.78
N	2,295	3,099		2,387	1,781	1,226		5,394
% who have dentures	14.4	19.0	*	18.9	15.8	12.0	n.s.	17.0
N	2,564	3,471		2,635	1,998	1,402		6,035
% who always use dentures when they eat	95.7	90.5	n.s.	92.1	93.4	92.3	n.s.	92.4
N	385	662		466	387	194		1,047
% who are satisfied with their dentures	83.2	84.2	n.s.	85.7	83.8	73.6	n.s.	83.8
N	383	655		463	387	188		1,038

Sig = Statistical significance, * p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

About 5% of the OPs do not have any natural teeth (Figure 4.1). The average number of teeth is 22, of functional teeth about 10 pairs; 17% of the OPs have dentures, with most using them for eating and being satisfied with them. More women use dentures than men but no other sex-based differences were observed. As expected, older age is significantly related to a higher prevalence of no teeth, a lower number of natural teeth, and a lower number of paired teeth. No significant differences were found for denture-related questions across age groups.

Figure 4.1 Mean Number of Natural Teeth by Sex and Age (%)
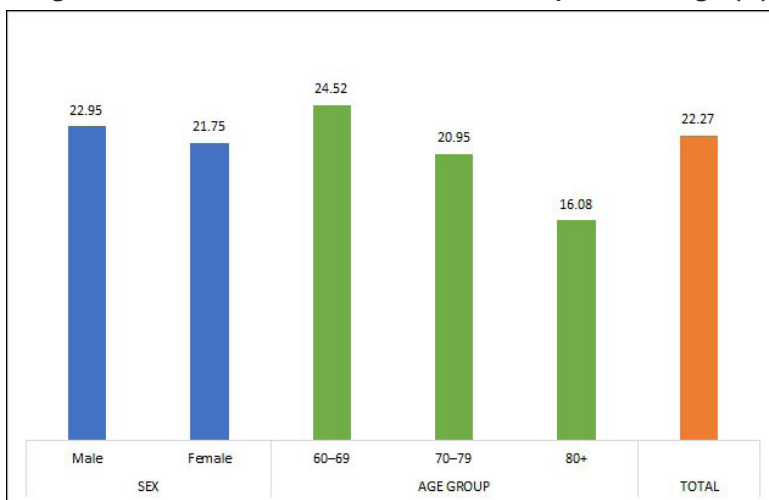
Source: Calculated by PHAD using original LSAHV data.

Sleep

The LSAHV assessed quantity and quality of sleep. We asked OPs how many hours they sleep per night on average and if they are satisfied with their sleep. They reported the frequency, using a 4-point scale (most of the time to never), of (i) having trouble falling asleep, (ii) having trouble waking up during the night, (iii) having trouble waking up too early and not being able to fall asleep again, and (iv) feeling rested upon waking in the morning. We asked OPs whether they use medications to help them sleep, if they take naps, and how long they nap.

Table 4.5. Sleeping Habits by Sex and Age

Sleeping Habits	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean no. of hours of sleep per night	5.52	5.23	*	5.51	5.15	5.02	*	5.36
N	2,225	2,784		2,379	1,714	916		5,009
% who are satisfied with their sleep	61.6	52.4	n.s.	60.5	52.4	45.0	n.s.	56.5
N	2,355	2,982		2,523	1,827	987		5,337
Have trouble falling asleep								
Most of time	21.4	29.9		23.7	28.1	34.0		26.1
Sometimes	44.0	43.3	n.s.	41.7	48.6	43.0	n.s.	43.6
Rarely	29.5	23.6		30.0	20.3	19.2		26.2
Never	5.1	3.3		4.6	3.0	3.7		4.1
N	2,341	2,965		2,515	1,815	976		5,306
Have trouble with waking up during the night								
Most of time	23.9	30.2		24.7	29.9	36.2		27.4
Sometimes	47.9	45.2	n.s.	44.8	50.6	46.0	n.s.	46.4
Rarely	24.9	22.6		27.3	18.3	16.2		23.6
Never	3.2	2.0		3.2	1.3	1.6		2.6
N	2,243	2,962		2,519	1,813	973		5,305
Have trouble with waking up too early and not being able to fall asleep again								
Most of the time	21.3	27.0		21.9	26.0	33.7		24.4
Sometimes	42.9	45.1	n.s.	42.7	47.0	45.2	n.s.	44.1
Rarely	30.5	23.6		29.9	23.3	17.5		26.6
Never	5.4	4.4		5.5	3.7	3.7		4.9
N	2,339	2,952		2,508	1,812	971		5,291
Feels rested when waking up in the morning								
Most of time	42.8	33.8		41.8	33.2	27.3		37.8
Sometimes	40.0	41.0	n.s.	39.2	41.7	43.6	n.s.	40.4
Rarely	15.6	22.1		17.0	21.4	25.5		19.2
Never	2.0	3.1		2.0	3.7	3.6		2.6
N	2,305	2,896		2,463	1,782	956		5,201
% who have taken any medications or used other treatments to help induce sleep in the past two weeks	6.9	9.1	n.s.	8.2	8.4	7.4	n.s.	8.1
N	2,563	3,468		2,633	1,997	1,401		6,031
% who take naps regularly	42.9	28.4	n.s.	33.9	34.0	38.1	n.s.	34.6
N	2,566	3,470		2,635	1,998	1,403		6,036
Mean duration of naps (in minutes)	61.05	56.97	**	56.97	57.79	67.18	**	58.89
N	1,877	2,242		1,815	1,355	949		4,119

Sig = Statistical significance, * p < 0.05, ** p < 0.01, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

On average, respondents sleep 5.36 hours per night and those who nap do so for about 1 hour per day. Men sleep and nap more than women, and older age is related to shorter night-time sleep and longer naps. Although over half of OPs are satisfied with their sleep, about one in four have trouble falling asleep most of the time, waking up during the night, or waking up too early and not being able to return to sleep. Most OPs sometimes, rarely, or never feel rested upon waking up. About 8% report using medications or treatment for sleep. No significant differences in sleep quality, sleep medications, and napping are found between men and women and across age.

Pain

We asked OPs whether they were often troubled with pain and if so, how they rate the severity of pain (mild, moderate, severe); if the pain makes it difficult for them to do a usual activity; and where the pain is located.

Table 4.6. Experience of Pain by Sex and Age

| Pain Experience	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who are often troubled with pain	31.2	42.6	*	32.9	43.0	49.4	n.s.	37.5
N	2,356	2,984		2,524	1,829	987		5,340
Severity of pain experienced								
Mild	24.8	23.4		26.3	20.8	21.5		23.9
Moderate	65.9	69.8	n.s.	65.7	73.4	68.6	n.s.	68.4
Severe	9.4	6.8		8.0	5.9	9.9		7.7
N	697	1,247		793	708	443		1,944
% who said pain make it difficult for them to do their usual activities	56.7	58.8	n.s.	55.8	54.8	70.2	n.s.	58.0
N	701	1,258		798	714	447		1,959
Body parts that felt pain								
Head	30.9	37.0	n.s.	35.2	31.2	38.9	n.s.	34.7
Neck	23.2	26.1	n.s.	25.9	21.5	28.0	n.s.	25.0
Shoulders	31.9	37.8	n.s.	32.4	38.4	41.2	n.s.	35.6
Back	52.3	61.8	n.s.	57.4	54.8	66.8	n.s.	58.3
Lower back	35.1	41.1	n.s.	41.0	34.2	40.2	n.s.	38.9
Joints of the hands/arms	35.8	38.1	n.s.	37.0	36.3	39.8	n.s.	37.3
Hip joint	43.4	51.0	n.s.	44.6	49.2	57.9	n.s.	48.2
Others (knees, ankles, feet, etc.)	53.1	61.5	n.s.	57.7	55.0	66.4	n.s.	58.4
N	698	1,252		795	712	443		1,950

Sig = Statistical significance, * p < 0.05, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

More than 30% of the OPs are troubled by pain, with most reporting moderate pain (Table 4.6, Figure 4.2). About 60% have difficulty performing usual activities because of the pain. The most frequently identified pain location is the back and the least the neck. More women experience pain than men. No significant differences in pain measures were found across age groups.

Figure 4.2. Older Persons Often Troubled with Pain by Sex and Age (%)
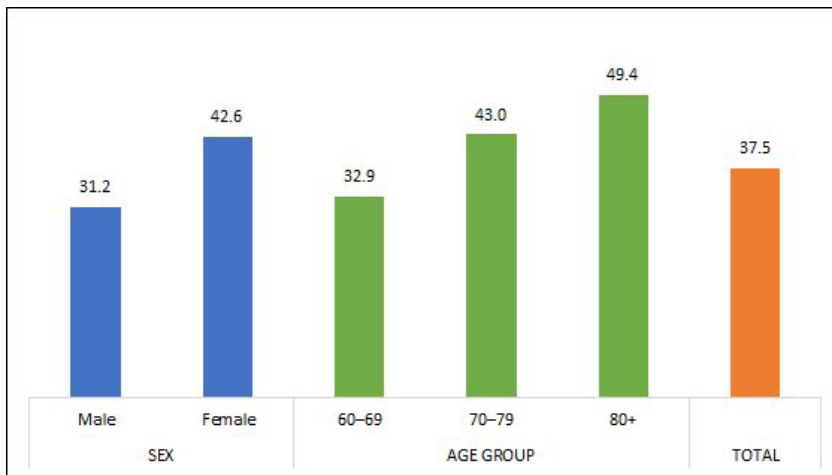
Source: Calculated by PHAD using original LSAHV data.

Falls

We asked OPs whether they had fallen in the past 12 months and if so, how many times they had fallen and whether they required medical attention because of the falls.

About 8.4% of OPs said they had fallen 3.71 times on average in the past 12 months (Table 4.7); 38% were injured seriously enough to need medical attention. No significant differences were found regarding sex and age.

Table 4.7. History of Falls by Sex and Age

History of Fall	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
% who fell in the past 12 months	6.6	9.6	n.s.	8.0	6.9	11.9	n.s.	8.4
N	2,565	3,470		2,632	2,000	1,403		6,035
Mean number of times fallen in the past 12 months	4.12	3.47	n.s.	3.91	4.54	2.58	n.s.	3.71
N	149	290		166	134	139		439
% who injured self seriously enough to need medical treatment	33.2	39.9	n.s.	36.8	38.1	39.1	n.s.	37.6
N	163	342		195	146	164		505

Sig = Statistical significance, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Incontinence

We asked the OPs whether they lose control of bladder or bowel movement and if so, asked how frequently, on a scale from 1 (very often) to 5 (very seldom).

Most OPs reported no loss of control (Table 4.8). Amongst those who had incontinence, the frequency for most was high, ranging from sometimes to very often. No significant differences were found regarding sex and age.

Table 4.8. Incontinence by Sex and Age

Incontinence	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Loss of bladder or bowel movement								
Both bladder or bowel movement control	1.3	1.0		0.3	1.2	3.9		1.1
Bladder control only	3.1	4.3	n.s.	2.4	4.4	8.1	n.s.	3.8
Bowel movement control only	0.4	0.5		0.3	0.7	0.7		0.5
No loss of control	95.2	94.2		97.0	93.8	87.3		94.6
N	2,533	3,427		2,600	1,988	1,372		5,960
Frequency								
Very often	8.6	13.6		5.2	11.5	17.9		11.6
Often	35.1	21.8		27.6	28.7	25.7		27.2
Sometimes	47.6	55.6	n.s.	55.2	49.9	51.4	n.s.	52.4
Seldom	7.3	6.3		8.4	7.8	4.2		6.7
Very seldom	1.4	2.7		3.6	2.1	0.8		2.1
N	183	253		109	118	209		436

Sig = Statistical significance, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Health Risk Behaviours

Smoking. We asked OPs whether they smoke cigarettes and if so, how many per day and at what age they started smoking. If the OPs currently did not smoke, we asked whether they had previously smoked and if so, how many cigarettes per day and what age they started and stopped smoking.

About 15% of OPs are current smokers and 12.4% former smokers (Table 4.9). The current smokers smoke on average 12 cigarettes per day; former smokers used to smoke on average 13 per day. Current smokers started smoking at age 22 on average. Former smokers started at 21 on average and stopped at 52 on average.

Table 4.9. Smoking by Sex and Age

Smoking	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
A. Current smokers								
% who currently smoke	33.0	1.6	**	18.2	12.6	7.6	n.s.	15.0
N	2,562	3,469		2,633	1,999	1,399		6,031
Mean number of cigarettes/cigars smoked per day	12.04	6.97	**	12.60	9.86	9.23	**	11.74
N	722	53		409	254	112		775
Mean age started smoking	21.53	33.66	***	22.24	22.11	22.40	**	22.23
N	593	41		343	207	84		634
B. Former smokers								
% who used to smoke	35.3	0.6	**	12.6	12.3	11.7	n.s.	12.4
N	1,773	3,328		2,149	1,701	1,251		5,101
Mean number of cigarettes/cigars smoked per day	12.78	16.87	*	12.93	13.48	11.94	n.s.	12.90
N	570	25		254	213	128		595
Mean age started smoking	21.04	19.68	**	20.16	21.80	23.00	n.s.	21.01
N	492	19		227	178	106		511
Mean age stopped smoking	52.22	54.35	n.s.	47.91	56.19	62.97	*	52.28
N	504	20		226	188	110		524

Sig = Statistical significance, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

More men currently smoke and much more than women (33% vs. 1.6%). Men started smoking significantly earlier than women. Significantly more men than women are former smokers, but the women smoked significantly more cigarettes than men and started at a younger age. There is no difference in the age men and women stopped smoking.

Amongst current smokers, although the proportion of smoking OPs did not differ by age, the average number of cigarette smoked per day decreased significantly by age. Significant difference was observed between the average age started smoking and age groups, but the actual ages in years were close. Amongst former smokers, there were no differences in the proportion, the number of cigarettes smoked per day, and the mean age of starting smoke. The older age group, however, stopped smoking at an older age than the younger age groups.

Drinking. We asked the OPs whether they currently drink alcohol and if so, how often and at what age they started drinking. If not, we asked whether they previously drank. If so, we asked at what ages they started and stopped drinking.

Table 4.10. Drinking by Sex and Age

Drinking	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
A. Current drinkers								
% who are currently alcohol drinkers	47.2	2.8	**	26.6	18.3	10.0	**	21.8
N	2,560	3,469		2,630	2,000	1,399		6,029
On average, frequency drinking alcohol amongst current alcohol drinkers								
(Almost) everyday	17.7	17.3		17.0	19.7	17.7		17.6
Once every two or three days	16.0	14.4		14.8	17.9	20.1		15.8
Once a week	10.7	7.5		11.8	6.8	7.5		10.5
Once or twice a month	16.8	10.4	n.s.	17.3	15.7	9.3	n.s.	16.3
Less than once a month	4.7	4.2		4.7	4.7	3.6		4.7
Occasional	34.2	46.3		34.3	35.2	41.8		35.1
N	1,061	107		653	363	152		1,168
Mean age started drinking regularly amongst those who are current alcohol drinkers	23.86	32.40	n.s.	23.68	26.18	26.86	n.s.	24.41
N	765	63		473	250	105		828
B. Former drinkers								
% who used to drink	36.2	2.3	**	10.5	14.7	14.0	n.s.	12.2
N	1,454	3,254		1,916	1,589	1,203		4,708
Mean age started drinking regularly amongst those who used to drink alcohol	22.67	27.60	n.s.	23.12	22.80	24.08	n.s.	23.21
N	356	395		137	168	90		395
Mean age stopped drinking regularly amongst those who used to drink alcohol	61.71	59.15	n.s.	56.15	63.55	70.67	*	61.50
N	343	34		133	149	95		377

Sig = Statistical significance, * p < 0.05, ** p < 0.01, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

About 22% of the OPs are current drinkers and 12% former drinkers (Table 4.10). Most current drinkers drink occasionally and started drinking at age 24 on average. Former drinkers started drinking at 23 on average and stopped at 62 on average.

More men than women are current drinkers (47.2% vs. 2.8%). The proportion of current drinkers decreased with age. However, the frequency of drinking and the average starting age are about the same by sex and age. More men than women are former drinkers (36.2% vs. 2.3%), but the starting and stopping ages are similar by sex and age. The proportion of former drinkers is the same across age groups. The average starting age is similar across age groups. However, the older age group stopped at a significantly older age than the younger age group.

Objective Measures of Health

We used kilograms (kg) and centimetres (cm). Body mass index (BMI, kg/m^2) was calculated for each OP. The BMI was then categorised into underweight (<18.50), normal weight (18.5–24.99), overweight (25–29.99), and obese (≥30). Waist circumference was also measured. Handgrip strength was displayed as an average of the right and left hands' force in kilograms. The three-test balance scale includes three timed static balance tasks of increasing difficulty. Gait speed was measured for 5 meters.

BMI differs significantly across age groups, with more younger OPs obese or overweight than the older ones (Table 4.11). The proportion of underweight in the oldest cohort is much higher than in other groups (80+: 28.1%; 70–79: 19.1%; 60–69: 11.2%). We observed no differences in the mean waist circumference by sex or age. Men had stronger grip than women. Older age was significantly related to decreased grip strength.

Men significantly held longer for the semi-tandem tests than women, but not for the side-by-side and tandem tests. Older OPs performed poorly on all three balance stances. Gender does not make a difference in gait speed. Older age is significantly related to slower gait.

Table 4.11. Objective Measures of Health by Sex and Age

Indicators	SEX			AGE GROUP				TOTAL
	Male	Female	Sig	60-69	70-79	80+	Sig	
Mean weight (kg)	56.18	50.48	**	54.90	51.17	47.76	*	52.92
N	2,362	3,159		2,516	1,853	1,152		5,521
Mean height standing (cm)	161.20	150.35	**	156.61	154.01	150.37	*	155.00
N	2,412	3,237		2,546	1,898	1,205		5,649
Computed Body Mass Index (BMI)								
Underweight (<18.50)	17.6	14.2		11.2	19.1	28.1		15.7
Normal weight (18.5-24.99)	69.4	65.0	n.s.	69.7	65.7	57.3	*	66.9
Overweight (25-29.99)	12.1	18.5		17.3	14.2	12.0		15.8
Obese (>=30)	0.8	2.3		1.7	1.0	2.6		1.7
N	2,357	3,150		2,513	1,851	1,143		5,507
Mean waist circumference (cm)	83.01	83.82	n.s.	84.10	83.12	81.63	*	84.47
N	2,412	3,238		2,535	1,890	1,225		5,650
Grip strength:								
% who were able to perform grip strength:	92.0	90.4	n.s.	94.1	91.1	80.7	**	91.1
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean score: Those able to perform grip strength (kg)	24.10	16.25	**	21.69	17.93	14.07	**	19.63
N	2,284	3,029		2,428	1,788	1,097		5,313
Balance test:								
Mean score (seconds) of those able to perform the following:								
Side-by-side	14.72	14.54	n.s.	14.81	14.47	14.02	*	14.62
N	2,305	3,053		2,483	1,797	1,078		5,358
Semi-tandem	14.39	13.97	*	14.57	13.86	12.87	*	14.15
N	2,297	3,034		2,478	1,794	1,059		5,331
Tandem	13.25	12.33	n.s.	13.63	12.16	9.88	**	12.73
N	2,261	1,946		2,456	1,767	984		5,207
Those able to perform the following in 15 seconds (%):								
Side-by-side	93.6	90.1	n.s.	95.6	87.1	82.3	n.s.	91.6
N	2,305	3,053		2,483	1,797	1,078		5,358
Semi tandem	88.4	81.4	*	90.4	78.2	69.2	**	84.4
N	2,297	3,034		2,478	1,794	1,059		5,331
Tandem	74.9	66.2	n.s.	78.4	61.8	46.6	*	70.0
N	2,261	1,946		2,456	1,767	984		5,207
Gait speed								
Those able to perform gait speed test (%)	91.5	91.1	n.s.	95.2	91.0	78.1	***	91.3
N	2,570	3,480		2,638	2,004	1,408		6,050
Mean duration (sec)	12.58	14.67	n.s.	12.77	13.96	17.71	n.s.	13.77
N	2,300	3,067		2,476	1,804	1,087		5,367

Sig = Statistical significance, * p < 0.05, ** p < 0.01, *** p < 0.001, n.s. = not significant.
Source: Calculated by PHAD using original LSAHV data.

Summary, Conclusions, and Recommendations

The report investigates health disparities in self-rated health, diagnosed illnesses, oral health, sleep, pain, falls, incontinence, mental health, health risk behaviours, and objective measures of health between sexes and age groups (60–69 years old vs. 70–79 years old vs. 80+ years old) amongst older adults in Viet Nam.

Self-rated health. A significant difference in self-rated health from birth to age 16 was observed between the sexes. Although more males considered themselves very healthy when growing up, more females said they were of above average health or average health during this period. There was no significant difference between age groups.

Diagnosed illnesses. There were no significant differences in group 1 and group 2 diseases between sexes. Age was not related to group 1 diseases, but older age was significantly associated with higher prevalence of group 2 diseases, specifically high blood pressure and respiratory illness. Moreover, the average age of experiencing heart attack was significantly higher amongst older age groups.

Oral health. The number of teeth and pairs of teeth was similar between sexes. Significantly more females than males had dentures. The number of teeth and pairs of teeth decreased significantly with increased age. There was no significant difference in denture usage between age groups.

Sleep. Males slept significantly longer than females, but the average hours of sleep for both sexes was lower than the recommended hours of sleep per night (7 or 8 hours). There were no differences in insomnia subtypes and sleep medication usage between sexes. Although the prevalence of taking naps was similar between sexes, males took significantly longer naps than females. The average number of sleep hours was negatively related to age group. Insomnia subtypes did not differ by age group. The prevalence of taking naps was similar across age groups, but older age groups took significantly longer naps than younger ones.

Pain. Significantly more females reported pain than males, but pain intensity, pain-related activity limitation, and specific pain locations did not differ by sex. Older age was not associated with the prevalence of pain, pain intensity, pain-related activity limitation, and specific pain locations.

Falls. The prevalence of falls in the past 12 months was lower than in the Western samples, but there were no significant differences in falls, number of falls, and fall-related medical treatment by sex and age group.

Incontinence. Most older adults reported no issues with continence. Amongst those who had lost control, the frequency of incontinence did not differ by sex and age group.

Smoking. Significantly more males than females were current smokers or past smokers. However, amongst the current smokers, males smoked significantly more cigarettes and/or cigars per day than females; amongst formers smokers, females smoked significantly more cigarettes and/or cigars per day than males. Male current smokers started at a significantly younger average age than female current smokers, and female former smokers started at a significantly younger average age than male former smokers. There was no difference in the prevalence of current smokers by age group, but older age was significantly related to fewer cigarettes and/or cigars smoked per day.

Drinking. Significantly more males were either current drinkers or former drinkers than females. Older age was significantly related to a lower prevalence of current drinkers. The frequency of drinking did not differ by sex and age group.

Objective measures of health. Females were significantly lighter and shorter than males. Females also had significantly weaker grip than males. Fewer females than males were able to complete the semi-tandem test. Older age was significantly related to reduced weight, height, waist circumference, grip strength, and the completion of semi-tandem, tandem, and gait speed tests. A higher proportion of those in older age groups were considered underweight and fewer had normal weight or were considered obese than those in the younger age groups.

The LSAHV included a nationally representative sample with extensive measures of health outcomes. The report depicts the health status amongst older adults in Viet Nam, providing important information for policymakers and healthcare professionals for planning and practice. Researchers should conduct further research to help better understand the health status of the ageing population in Viet Nam and develop timely interventions.

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