

Supplementary Table 1. Detailed barriers and reasons for non-participation in health check-ups among study participants

Respondents with experience of health check-ups	n = 182
Difficulties experienced with health check-ups	133 (73.1%)
Concern regarding disclosure of HIV status	95 (71%)
Fear of being diagnosed with other diseases, such as cancer	60 (45%)
Difficulty taking time off for health check-ups	50 (38%)
Reluctance to visit other medical institutions	38 (29%)
Inconvenience of health check-ups (transportation, distance, etc.)	32 (24%)
Financial burden	19 (14%)
Concern about encountering an acquaintance	12 (9%)
Fear of pain or discomfort during check-ups	12 (9%)
Experienced pain during check-ups	9 (7%)
Difficulty finding information on check-ups methods and institutions	8 (6%)
Respondents without experience of health check-ups	n = 52
Reasons for not receiving a health check-up	
Concern regarding disclosure of HIV status	24 (46%)
Perceiving health check-ups as unnecessary	21 (40%)
Fear of being diagnosed with other diseases, such as cancer	13 (25%)
Inconvenience related to health check-ups	12 (23%)
Reluctance to visit other medical institutions	11 (21%)
Difficulty taking time off for health check-ups	11 (21%)
Lack of knowledge about National Health Insurance health check-ups	8 (15%)
Lack of knowledge about health check-up and relevant institution	10 (19%)
Never received a National Health Insurance information brochure	8 (15%)
Financial burden	7 (13%)
Experienced pain during check-ups	4 (8%)
Concern about encountering an acquaintance	0 (0%)

Supplementary Table 2. Additional comparison of respondents' characteristics by health check-up status

	Regular n = 111	Non-regular n=71	Without experience n =52	P- value
Male sex	102 (91.9%)	67 (94.4%)	48 (92.3%)	0.814
Height, cm	172.0 (167.3–177.0)	173.0 (167.5–177.2)	174.0 (169.5–177.0)	0.848
Weight, kg	72.0 (65.0–81.5)	70.0 (62.5–81.5)	70.0 (65.5–80.0)	0.352
Body mass index	24.6 (22.4–27.4)	23.9 (21.2–26.6)	24.2 (22.0–26.0)	0.152
Comorbidity	59 (53.2%)	37 (52.1%)	21 (40.4%)	0.288
HTN	26 (23.4%)	21 (29.6%)	8 (15.4%)	0.186
Diabetes mellitus	19 (17.1%)	12 (16.9%)	6 (11.5%)	0.632
PVD	0	1 (1.4%)	0	0.316
Ischemic heart disease	1 (0.9%)	4 (5.6%)	3 (5.8%)	0.132
Lipodystrophy	0	0	0	
CVA	1 (0.9%)	3 (4.2%)	0	0.135
Cancer	1 (0.9%)	5 (7.0%)	2 (3.8%)	0.083
Fatty liver disease	12 (10.8%)	6 (8.5%)	1 (1.9%)	0.152
Self-health status assessment				0.329
Very good	3 (2.8%)	0	0	
Good	38 (34.9%)	17 (23.9%)	13 (25.5%)	
Average	55 (50.5%)	44 (62.0%)	30 (58.8%)	
Bad	12 (11.0%)	7 (9.9%)	7 (13.7%)	
Very bad	1 (0.9%)	3 (4.2%)	1 (2.0%)	
Stress Level				0.992
Never	4 (3.6%)	2 (2.9%)	2 (3.9%)	
Rarely	16 (14.4%)	12 (17.1%)	7 (13.7%)	
Sometimes	62 (55.9%)	37 (52.9%)	26 (51.0%)	
Frequently	22 (19.8%)	16 (22.9%)	12 (23.5%)	
Always	7 (6.3%)	3 (4.3%)	4 (7.8%)	
Negative Feelings in the past 2 weeks				0.237
Never	18 (16.2%)	7 (9.9%)	4 (7.7%)	
Rarely	34 (30.6%)	30 (42.3%)	17 (32.7%)	
Sometimes	47 (42.3%)	20 (28.2%)	22 (42.3%)	
Frequently	11 (9.9%)	11 (15.5%)	7 (13.5%)	
Always	1 (0.9%)	3 (4.2%)	2 (3.8%)	

Highest Education Level				0.172
Elementary school graduate or lower	0	3 (4.2%)	0	
Middle school graduate	7 (6.5%)	5 (7.0%)	6 (12.2%)	
High school graduate	39 (36.1%)	27 (38.0%)	18 (36.7%)	
Currently attending university	1 (0.9%)	1 (1.4%)	2 (4.1%)	
University graduate	54 (50.0%)	30 (42.3%)	23 (46.9%)	
Graduate school graduate or higher	7 (6.5%)	5 (7.0%)	0	
Exercise				0.079
No exercise	18 (16.2%)	23 (32.9%)	16 (30.8%)	
1-2 times/month	12 (10.8%)	12 (17.1%)	10 (19.2%)	
1-2 times/week	32 (28.8%)	12 (17.1%)	8 (15.4%)	
3-4 times/week	25 (22.5%)	13 (18.6%)	10 (19.2%)	
≥5 times/week	24 (21.6%)	10 (14.3%)	8 (15.4%)	
Walking	55 (49.5%)	31 (44.3%)	25 (48.1%)	0.786
Running	20 (18.0%)	12 (17.1%)	6 (11.5%)	0.565
Weight change				0.373
No change	66 (59.5%)	45 (64.3%)	27 (51.9%)	
Decrease 3–6kg	8 (7.2%)	7 (10.0%)	9 (17.3%)	
Decrease ≥ 6kg	6 (5.4%)	5 (7.1%)	3 (5.8%)	
Increase 3–6kg	24 (21.6%)	7 (10.0%)	8 (15.4%)	
Increase ≥ 6kg	7 (6.3%)	6 (8.6%)	5 (9.6%)	
Effort to control weight				0.285
Trying to lose weight	42 (38.2%)	28 (39.4%)	15 (30.0%)	
Trying to maintain weight	35 (31.8%)	18 (25.4%)	10 (20.0%)	
Trying to gain weight	11 (10.0%)	6 (8.5%)	6 (12.0%)	
No attempt	22 (20.0%)	19 (26.8%)	19 (38.0%)	
Occupation				0.015
Unemployed	19 (17.1%)	17 (23.9%)	21 (40.4%)	
Student	2 (1.8%)	1 (1.4%)	1 (1.9%)	
Housekeeper	1 (0.9%)	2 (2.8%)	1 (1.9%)	
Self-employed	24 (21.6%)	14 (19.7%)	10 (19.2%)	
Office worker	32 (28.8%)	18 (25.4%)	5 (9.6%)	
Service worker	11 (9.9%)	13 (18.3%)	9 (17.3%)	

Professional	16 (14.4%)	3 (4.2%)	1 (1.9%)
Day laborer	2 (1.8%)	2 (2.8%)	0
Others	4 (3.6%)	1 (1.4%)	4 (7.7%)

* Continuous variables were described as median (interquartile range), and discrete variables were described as numbers (percentages).

PVD, peripheral vascular disease

Supplementary Table 3. Association between types of health check-ups and socioeconomic factors (age and income) among PLWH

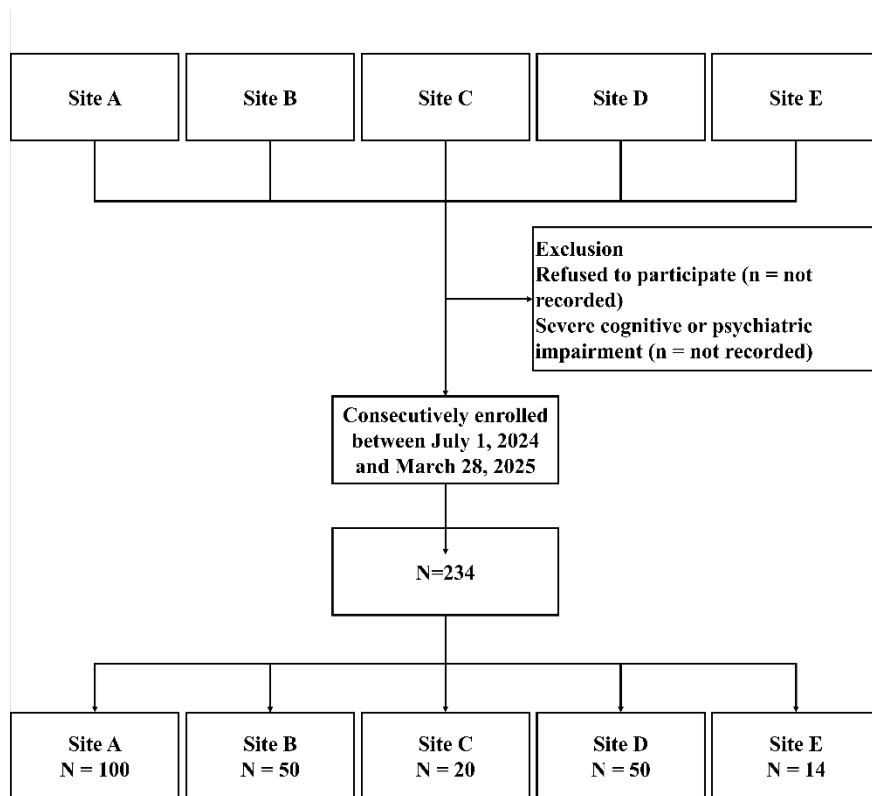
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Supplementary Table 4. Subgroup analysis of factors associated with receiving health check-ups among male PLWH

	Multivariable analysis	
	OR (95% CI)	P-value
Socioeconomic Factors		
Monthly income of ≥ 3 million won	2.18 (0.95–5.07)	0.066
Occupation	2.02 (0.84–4.90)	0.116
Lifestyle Factors		
Alcohol consumption (ref: ≤ 1 time/month)		
2–4 times/month	3.53 (1.38–10.16)	0.012
≥ 2 times/week	1.33 (0.54–3.43)	0.542
Balanced and regular meal (ref: Never/rarely)		
Sometimes	2.24 (0.87–5.75)	0.092
Frequently/always	2.79 (0.96–8.43)	0.062
Demographic and Clinical Characteristics		
Age ≥ 40 years	2.44 (1.12–5.46)	0.027
Dyslipidaemia	2.12 (0.80–6.43)	0.152

Supplementary Table 5. Sensitivity analysis of factors associated with receiving health check-ups using an a priori purposeful selection model

	Multivariable analysis	
	OR (95% CI)	P-value
Socioeconomic Factors		
Monthly income of ≥ 3 million won	2.62 (1.18–5.97)	0.019
Occupation	1.77 (0.77–4.14)	0.181
Lifestyle Factors		
Smoking (ref: Non-smoker)		
Ex-smoker	0.88 (0.34–2.28)	0.785
Current smoker	1.17 (0.48–2.82)	0.731
Alcohol consumption (ref: ≤ 1 time/month)		
2–4 times/month	3.69 (1.45–10.60)	0.009
≥ 2 times/week	1.23 (0.50–3.20)	0.664
Balanced and regular meal (ref: Never/rarely)		
Sometimes	2.48 (0.97–6.32)	0.056
Frequently/always	3.09 (1.06–9.27)	0.040
Demographic and Clinical Characteristics		
Age ≥ 40 years	2.62 (1.14–6.18)	0.025
Female sex	0.86 (0.24–3.67)	0.827
Obesity	0.87 (0.41–1.84)	0.707
With any comorbidity	1.43 (0.64–3.21)	0.380



The total number of patients who were approached, declined participation, or were excluded due to cognitive/psychiatric impairments was not recorded during the consecutive enrolment process (STROBE Item 13). Consequently, a formal response rate cannot be calculated and non-response bias cannot be assessed (STROBE Item 14); this is acknowledged as a major limitation of the study. All patients who consented to participate completed the questionnaire entirely, resulting in no missing data for the final analysis.