**Supplementary Materials**

**Supplementary Material 1. General characteristics of study participants (N=9,675)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Male** **(N=3,966)** | **Female** **(N=5,709)** | ***P* value** |
|  Mean, N | (SD, %) |  Mean, N  | (SD, %) |
| Age (years), mean (SD) |  51.24  | (9.10) |  51.94  | (8.29) | <.001 |
| Age group, N (%) |  |  |  |  |  |
|  <50 years |  1,495  | (37.70) |  1,832  | (32.09) | <.001 |
|  ≥50 years |  2,471  | (62.30) |  3,877  | (67.91) |  |
| Study site, N (%)a |  |  |  |  |  |
|  CMERC, Yonsei university |  1,424  | (35.91) |  2,634  | (49.80) | <.001 |
|  CMERC, Ajou university |  1,382  | (34.85) |  2,655  | (50.20) |  |
|  CMERC-HI, Sevrance hospital |  1,160  | (29.25) | 420 | (7.36) |  |
| Education level, N (%) |  |  |  |  |  |
|  ≤6 years |  140  | (3.53) |  410  | (7.18) | <.001 |
|  6-9 years |  234  | (5.90) | 678 | (11.88) |  |
|  9-12 years |  1,357  | (34.22) |  2,681  | (46.96) |  |
|  12+ years |  2,235  | (56.35) |  1,940  | (33.98) |  |
| Occupational status, N (%)b |  |  |  |  |  |
|  Office worker |  2,205  | (55.60) |  1,402  | (24.56) | <.001 |
|  Site worker |  1,286  | (32.43) |  1,655  | (28.99) |  |
|  Home maker |  2  | (0.05) |  2,526  | (44.25) |  |
|  Unemployed | 459 | (11.57) |  114 | (2.00) |  |
| Household income level (year), N (%) |  |  |  |  |  |
|  Q1 (<24,000 $) | 971 | (24.48) |  1,608  | (28.17) | <.001 |
|  Q2 (24,000-34,641 $) | 935  | (23.58) |  1,499  | (26.26) |  |
|  Q3 (34,641-48,299 $) | 999  | (25.19) |  1,363  | (23.87) |  |
|  Q4 (≥ 48,299 $) |  1,061  | (26.75) |  1,239  | (21.70) |  |
| Marital status, N (%) |  |  |  |  |  |
|  Unmarried | 263 | (6.63) |  212  | (3.71) | <.001 |
|  Married-death of spouse | 13  | (0.33) |  325  | (5.69) |  |
|  Married-separated | 109  | (2.75) |  385  | (6.74) |  |
|  Married-living together |  3,581  | (90.29) |  4,787  | (83.85) |  |
| Previous chronic disease, N (%)c |  |  |  |  |  |
|  Yes |  2,293  | (57.82) |  2,771  | (48.54) | <.001 |
|  No |  1,673  | (42.18) |  2,938  | (51.46) |  |
| Depressive symptom, N (%) |  |  |  |  |  |
|  BDI-II <20 |  3,642  | (91.83) |  4,925  | (86.28) | <.001 |
|  BDI-II ≥20 |  324  | (8.17) |  783  | (13.72) |  |
| a CMERC study enrolled participants among community-dwellers without overt CVDs (ever) or cancer (past 2 years) history; CMERC-HI study enrolled participants from patients who are at a high risk of developing ASCVD. |
| b 26 participants excluded due to missing/unknown information |
| c Chronic diseases history included in CMERC study: stroke, transient ischemic attacks, myocardial infarction, angina pectoris, heart failure, chronic kidney disease, hypertension, dyslipidemia, diabetes, thyroid disease, fatty liver, chronic hepatitis, liver cirrhosis, asthma or chronic obstructive pulmonary disease, osteoporosis, arthritis, autoimmune disease, and malignant tumors |
| (Abbreviation) Standard daviation, SD; CMERC, Cardiovascular and Metabolic Diseases Etiology Research Center; BDI-II, Beck Depression Inventory-II |