**Tables**

**Table 1: Dependent variables re-coding procedures.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Code at STEP datasets** | **Categories in STEP** | **Recoding procedures** |
| **Raised blood pressure or hypertension (systolic)** | First reading: m11a/ m4a  Second reading: m12a/ m5a  Third reading: m13a/ m6a | Yes [average of three readings ≥ 140 mm Hg]  No (otherwise) | 1 = "Yes"  0 = "No" |
| **Raised blood pressure or hypertension (diastolic)** | First reading: m11b/ m4b  Second reading: m12b/ m5b  Third reading: m13b/ m6b | Yes [average of three readings ≥ 90 mm Hg]  No (otherwise) | 1 = "Yes"  0 = "No" |
| **Raised blood glucose or Diabetes** | b5 | Yes [fasting blood glucose≥126 mg/dL or 7 mmol/L]  No (otherwise) | 1 = "Yes"  0 = "No" |
| **Raised total blood cholesterol or hypercholesterolemia** | b8 | Yes [Total blood cholesterol ≥190 or 5 mmol/L]  No (otherwise) | 1 = "Yes"  0 = "No" |

**Table 2: Independent variables re-coding procedures.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Code at STEP datasets** | **Categories in STEP** | **Recoding procedures** |
| **Socio-economic background** |  |  |  |
| Age (18 years or above) | age | 18-29 | 0 = "18-29" |
|  |  | 30-44 | 1 = "30-44" |
|  |  | 45-59 | 2 = "45-59" |
|  |  | 60 or above | 3 = "60 or above" |
| Sex | sex | Female | 0 = "Female" |
|  |  | Male | 1 = "Male" |
| Highest level of education | c5 | No formal schooling to basic literacy | 0 = "No formal schooling to basic literacy" |
|  |  | Less than primary to Primary school completed | 1 = "Less than primary to Primary school completed" |
|  |  | Secondary school completed to High school completed | 2 = "Secondary school completed to High school completed" |
|  |  | College or higher | 3 = "College or higher" |
| Marital status | c7 | Currently Married | 0 = "Currently Married" |
|  |  | Not Married | 1 = "Not Married" |
| Work status | c8 | Employee/ Business/ Agriculture/ Labour | 0 = "Employee/Business/ Agriculture/Labour" |
|  |  | Homemaker/ Other voluntary work | 1 = "Homemaker/Other voluntary work " |
|  |  | Unemployed | 2 = "Unemployed" |
| **Food intake** |  |  |  |
| Current smoking | t1 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Fruit eaten in a week | d1 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Vegetables eaten in a week | d3 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Adding salt when eating | d5a/ds1 | Always/ Often | 0 = "Always/ Often" |
|  |  | Sometimes/ Rarely | 1 = "Sometimes/ Rarely" |
|  |  | Never | 2 = "Never" |
| Oil used most often | dx6/d5/d8 | Coconut/groundnut/ Sunflower/Mustard | 0 = "Coconut/groundnut/ Sunflower/Mustard" |
|  |  | Soybean/ Vegetable/ Palm | 1 = "Soybean/ Vegetable/ Palm" |
|  |  | Others/ Olive/ Corn / Not specific | 2 = "Others/ Olive/ Corn / Not specific" |
| Meals eaten outside in a week | dx7/d6/d9 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| **Physical activity** |  |  |  |
| Vigorous activity at work | p1 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Moderate activity at work | p4 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Active transport | p7 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Vigorous leisure activity | p10 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Moderate leisure activity | p13 | No | 0 = "No" |
|  |  | Yes | 1 = "Yes" |
| Height | m3/m11 | Height in Centimeter |  |
| Weight | m4/m12 | Weight in Kilograms |  |
| Obesity |  | No (BMI < 30 kg/m2) | 0 = "No" |
|  |  | Yes (BMI ≥ 30 kg/m2) | 1 = "Yes" |

**Table 3: Mean (Standard Error (SE)) and 95% Confidence Interval (CI) of selected parameters of NCDs in Southeast Asian adults**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Systolic blood pressure** | | **Diastolic Blood pressure** | | | **Blood glucose** | | | | **Total blood cholesterol** | | |
|  | **Mean (SE)** | **95% CI** | **Mean (SE)** | **95% CI** | **Mean (SE)** | | **95% CI** | **Mean (SE)** | | | **95% CI** |
| **Maldives** | 121.38 (0.46) | 120.48 – 122.28 | 76.64 (0.32) | 76.00 – 77.27 | self-reported | | | | not measured | | | |
| **Sri Lanka** | 125.87 (0.35) | 125.17 – 126.56 | 84.46 (1.50) | 81.51 – 87.42 | 81.66 (0.96) | | 79.77 – 83.56 | 152.20 (1.35) | | | 149.54 – 154.86 |
| **Myanmar** | 126.95 (1.24) | 124.45 – 129.44 | 82.27 (0.70) | 80.85 – 83.69 | 92.69 (1.30) | | 90.07 – 95.31 | 152.20 (1.35) | | | 149.54 – 154.86 |
| **Timor-Leste** | 129.85 (2.62) | 124.68 – 135.02 | 83.32 (1.22) | 80.92 – 85.73 | 77.59 (0.90) | | 75.80 – 79.37 | 139.69 (2.47) | | | 134.80 – 144.57 |
| **Bangladesh** | 121.44 (0.40) | 120.66 – 122.23 | 79.21 (0.28) | 78.66 – 79.75 | 97.32 (0.60) | | 96.15 – 98.50 | 167.64 (0.92) | | | 165.84 – 169.45 |
| **Nepal** | 125.65 (0.46) | 124.74 – 126.60 | 82.51 (0.33) | 81.87 – 83.16 | 94.16 (0.93) | | 92.32 –96.00 | 142.88 (1.16) | | | 140.59 – 145.17 |
| **Total** | 126.82 (1.02) | 124.81 – 128.82 | 82.04 (0.61) | 80.84 – 83.23 | 90.42 (1.23) | | 88.01 – 92.84 | 171.66 (1.21) | | | 169.29 – 174.03 |

**Table 4: Distribution of Hypertension by socio-economic variables**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Maldives**  **(n = 1627)** | **Sri Lanka**  **(n = 4739)** | **Myanmar**  **(n = 7989)** | **Timor-Leste**  **(n=2572)** | **Bangladesh**  **(n=8182)** | **Nepal**  **(n=5364)** |
|  | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** |
| **Socio-economic background** |  |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |
| 18-29 | 568 (50.82) | 725 (35.18) | 764 (15.27) | 665 (42.34) | 1940 (28.29) | 1241 (40.44) |
| 30-44 | 525 (32.67) | 1662 (28.56) | 3042 (45.78) | 941 (29.71) | 3504 (38.51) | 2035 (31.11) |
| 45-59 | 422 (14.51) | 1557 (25.69) | 3332 (31.78) | 586 (12.11) | 2152 (25.35) | 1396 (19.51) |
| 60 or above | 112 (2.00) | 795 (10.58) | 851 (7.18) | 380 (15.85) | 586 (7.85) | 692 (8.94) |
| ***Sex*** |  |  |  |  |  |  |
| Male | 583 (48.85) | 1831 (51.33) | 2762 (49.63) | 1066 (34.32) | 3801 (45.43) | 1909 (46.56) |
| Female | 1044 (51.15) | 2908 (48.67) | 5227 (50.37) | 1506 (65.68) | 4381 (54.57) | 3455 (53.44) |
| ***Highest level of education*** |  |  |  |  |  |  |
| No formal schooling to basic literacy | 415 (14.09) | 253 (3.80) | 1183 (13.24) | 868 (35.61) | 2476 (33.63) | 80 (2.18) |
| Less than primary to Primary school completed | 399 (22.06) | 677 (11.16) | 4788 (57.78) | 933 (37.07) | 3734 (45.75) | 1506 (42.53) |
| Secondary school completed to High school completed | 644 (52.22) | 1359 (27.16) | 1476 (20.81) | 639 (25.21) | 1396 (15.99) | 1431 (50.12) |
| College or higher | 162 (11.64) | 2440 (57.89) | 519 (8.17) | 86 (2.10) | 555 (4.62) | 175 (5.17) |
| ***Marital status*** |  |  |  |  |  |  |
| Currently Married | 1103 (61.81) | - | 6061 (77.29) | 2030 (63.26) | 7248 (87.88) | 4726 (83.57) |
| Not Married | 519 (38.19) | - | 1925 (22.71) | 537 (36.74) | 934 (12.12) | 638 (16.43) |
| ***Work status*** |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 625 (48.14) | 1140 (28.17) | 894 (12.18) | 426 (13.26) | 3592 (42.57) | 482 (10.59) |
| Home maker/Other voluntary work | 677 (32.47) | 2625 (48.01) | 6496 (80.14) | 1566 (70.46) | 4143 (52.81) | 4352 (73.96) |
| Unemployed | 314 (19.38) | 969 (23.82) | 593 (7.68) | 474 (16.28) | 444 (4.62) | 524 (15.46) |
| **Food intake** |  |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |
| Daily/Yes | 247 (19.40) | 588 (14.90) | 1791 (25.99) | 808 (48.71) | 1922 (22.99) | 1054 (18.17) |
| Less than daily/No | 1374 (80.60) | 4148 (85.10) | 6196 (74.01) | 1763 (51.29) | 6260 (77.01) | 4310 (81.83) |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |
| Yes | 1252 (81.87) | 4531 (97.03) | 5894 (74.45) | 2030 (93.83) | 5129 (62.70) | 3857 (76.48) |
| No | 279 (18.13) | 140 (2.97) | 1810 (25.55) | 351 (6.17) | 2823 (37.30) | 1272 (23.52) |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |
| Yes | 1395 (88.97) | 4716 (99.79) | 7862 (98.79) | 2452 (99.46) | 8153 (99.86) | 5317 (99.68) |
| No | 172 (11.03) | 9 (0.21) | 110 (1.21) | 28 (0.54) | 19 (0.14) | 20 (0.32) |
| ***Adding salt when eating*** |  |  |  |  |  |  |
| Always/Often | - | - | - | 2187 (78.17) | 3859 (49.21) | 369 (5.85) |
| Sometimes/Rarely | - | - | - | 301 (20.60) | 1474 (19.64) | 2903 (54.36) |
| Never | - | - | - | 76 (1.23) | 2846 (31.14) | 2079 (39.78) |
| ***Oil used most often*** |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 399 (25.13) | 4106 (87.85) | 3649 (53.18) | - | 652 (9.61) | 2137 (43.14) |
| Soybean/Vegetable/ Palm | 972 (62.25) | 529 (10.80) | 3507 (39.73) | 2416 (97.63) | 7337 (88.92) | 2849 (51.88) |
| Others/ Olive/Corn /Not specific | 224 (12.63) | 83 (1.34) | 693 (7.08) | 148 (2.37) | 193 (1.46) | 378 (4.99) |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |
| Yes | 576 (48.87) | 1322 (34.64) | 1201 (16.08) | 259 (17.13) | 2158 (24.35) | 1395 (32.94) |
| No | 889 (51.13) | 3360 (65.36) | 6680 (83.92) | 1820 (82.87) | 5745 (75.65) | 3720 (67.06) |
| **Physical activity** |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |
| Yes | 93 (6.82) | 1001 (23.39) | 1388 (22.81) | 1107 (49.44) | 2173 (30.13) | 2577 (44.80) |
| No | 1526 (93.18) | 3730 (76.61) | 6597 (77.19) | 1461 (50.56) | 6009 (69.87) | 2787 (55.20) |
| ***Moderate activity at work*** |  |  |  |  |  |  |
| Yes | 269 (17.41) | 2708 (56.72) | 4932 (62.54) | 1842 (86.79) | 6381 (81.64) | 4418 (80.93) |
| No | 1350 (82.59) | 2023 (43.28) | 3053 (37.46) | 726 (13.21) | 1801 (18.36) | 946 (19.07) |
| ***Active transport*** |  |  |  |  |  |  |
| Yes | 882 (50.02) | 2698 (56.37) | 6082 (73.10) | 1078 (40.51) | 5104 (62.04) | 4470 (83.82) |
| No | 742 (49.98) | 2033 (43.63) | 1903 (26.90) | 1490 (59.49) | 3078 (37.96) | 894 (16.18) |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |
| Yes | 273 (21.53) | 158 (5.98) | 151 (3.00) | 162 (13.12) | 415 (5.42) | 243 (7.53) |
| No | 1345 (78.47) | 4573 (94.02) | 7834 (97.0) | 2406 (86.88) | 7767 (94.58) | 5121 (92.47) |
| ***Moderate leisure activity*** |  |  |  |  |  |  |
| Yes | 376 (24.20) | 310 (10.81) | 786 (11.44) | 233 (12.78) | 551 (7.09) | 692 (16.58) |
| No | 1242 (75.80) | 4421 (89.19) | 7199 (88.56) | 2335 (87.22) | 7631 (92.91) | 4672 (83.42) |
| ***Obesity*** |  |  |  |  |  |  |
| Yes | 257 (12.06) | 325 (5.72) | 524 (5.91) | 56 (0.94) | 552 (5.70) | 311 (4.65) |
| No | 1360 (87.94) | 4244 (94.28) | 7377 (94.09) | 2428 (99.06) | 7458 (94.30) | 4991 (95.35) |

**Table 5: Distribution of Hyperglycemia by socio-economic variables**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Maldives**  **(n = 1635)** | **Sri Lanka**  **(n = 4394)** | **Myanmar**  **(n = 7844)** | **Timor-Leste**  **(n = 2429)** | **Bangladesh**  **(n = 8185)** | **Nepal**  **(n = 4989)** |
|  | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** |
| **Socio-economic background** |  |  |  |  |  |  |
| ***Age (18 years or above)*** | 577 (50.98) | 646 (33.97) | 748 (15.19) | 622 (43.96) | 1942 (28.33) | 1154 (40.67) |
| 18-29 | 532 (32.66) | 1546 (29.06) | 2984 (45.59) | 893 (32.04) | 3505 (38.48) | 1876 (30.95) |
| 30-44 | 423 (14.35) | 1461 (26.30) | 3277 (31.99) | 552 (12.65) | 2152 (25.34) | 1310 (19.56) |
| 45-59 | 114 (2.00) | 741 (10.68) | 835 (7.22) | 362 (11.34) | 586 (7.84) | 649 (8.81) |
| 60 or above |  |  |  |  |  |  |
| ***Sex*** |  |  |  |  |  |  |
| Male | 591 (48.95) | 1686 (48.99) | 2711 (49.86) | 996 (36.72) | 3804 (45.46) | 1754 (46.48) |
| Female | 1055 (51.05) | 2708 (51.01) | 5133 (50.14) | 1433 (63.28) | 4381 (54.54) | 3235 (53.52) |
| ***Highest level of education*** |  |  |  |  |  |  |
| No formal schooling to basic literacy | 420 (14.13) | 219 (3.61) | 1167 (13.36) | 821 (32.17) | 2476 (33.61) | 77 (2.30) |
| Less than primary to Primary school completed | 404 (21.98) | 619 (10.90) | 4700 (57.64) | 879 (39.03) | 3735 (45.77) | 1404 (42.56) |
| Secondary school completed to High school completed | 652 (52.30) | 1253 (26.73) | 1446 (20.78) | 607 (26.78) | 1397 (15.98) | 1330 (50.23) |
| College or higher | 163 (11.59) | 2295 (58.77) | 508 (8.22) | 77 (2.03) | 556 (4.63) | 161 (4.92) |
| ***Marital status*** |  |  |  |  |  |  |
| Currently Married | 1116 (61.82) | - | 5956 (77.30) | 1920 (67.40) | 7250 (87.84) | 4395 (83.77) |
| Not Married | 525 (38.18) | - | 1885 (22.70) | 502 (32.60) | 935 (12.16) | 594 (16.23) |
| ***Work status*** |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 628 (47.82) | 1066 (28.48) | 873 (12.17) | 392 (13.60) | 3593 (42.59) | 438 (10.09) |
| Home maker/Other voluntary work | 686 (32.45) | 2403 (47.64) | 6378 (80.17) | 1496 (69.74) | 4144 (52.79) | 4051 (74.12) |
| Unemployed | 321 (19.73) | 919 (23.88) | 587 (7.66) | 438 (16.67) | 445 (4.61) | 494 (15.79) |
| **Food intake** |  |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |
| Daily/Yes | 251 (19.48) | 532 (14.38) | 1755 (25.76) | 754 (54.38) | 1923 (22.98) | 976 (17.95) |
| Less than daily/No | 1389 (80.52) | 3859 (85.62) | 6087 (74.24) | 1672 (45.62) | 6262 (77.02) | 4013 (82.05) |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |
| Yes | 1265 (81.90) | 4199 (96.95) | 5784 (74.57) | 1918 (93.47) | 5131 (62.71) | 3598 (76.73) |
| No | 282 (18.10) | 138 (3.05) | 1779 (25.43) | 338 (6.53) | 2824 (37.29) | 1182 (23.27) |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |
| Yes | 1411 (89.00) | 4375 (99.84) | 7721 (98.79) | 2318 (99.48) | 8156 (99.86) | 4946 (99.63) |
| No | 174 (11.00) | 8 (0.16) | 107 (1.21) | 26 (0.52) | 19 (0.14) | 20 (0.37) |
| ***Adding salt when eating*** |  |  |  |  |  |  |
| Always/Often | - | 1003 (22.63) |  | 2062 (76.46) | 3859 (49.18) | 344 (5.95) |
| Sometimes/Rarely | - | 1028 (25.60) |  | 297 (22.52) | 1474 (19.63) | 2696 (54.78) |
| Never | - | 2312 (51.78) |  | 61 (1.03) | 2849 (31.19) | 1936 (39.27) |
| ***Oil used most often*** |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 404 (25.05) | 3784 (87.27) | 3600 (53.42) | - | 652 (9.61) | 1988 (43.53) |
| Soybean/Vegetable/ Palm | 983 (62.42) | 509 (11.29) | 3434 (39.47) | 2279 (97.51) | 7340 (88.93) | 2640 (51.42) |
| Others/ Olive/Corn /Not specific | 225 (12.53) | 80 (1.44) | 681 (7.11) | 141 (2.49) | 193 (1.46) | 361 (5.05) |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |
| Yes | 582 (51.04) | 1243 (64.77) | 1164 (15.92) | 1731 (81.91) | 2159 (24.34) | 1289 (32.77) |
| No | 900 (48.96) | 3103 (35.23) | 6572 (84.08) | 236 (18.09) | 5747 (75.66) | 3466 (67.23) |
| **Physical activity** |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |
| Yes | 93 (6.73) | 879 (22.23) | 1367 (22.63) | 1046 (46.67) | 2173 (30.12) | 2397 (45.21) |
| No | 1545 (93.27) | 3507 (77.77) | 6473 (77.37) | 1378 (53.33) | 6012 (69.88) | 2592 (54.79) |
| ***Moderate activity at work*** |  |  |  |  |  |  |
| Yes | 269 (17.18) | 2488 (56.46) | 4844 (62.60) | 1736 (86.54) | 6382 (81.64) | 4109 (80.89) |
| No | 1369 (82.82) | 1898 (43.54) | 2996 (37.40) | 688 (13.46) | 1803 (18.36) | 880 (19.11) |
| ***Active transport*** |  |  |  |  |  |  |
| Yes | 890 (49.88) | 2476 (55.62) | 5965 (72.91) | 1036 (43.20) | 5107 (62.07) | 4174 (83.95) |
| No | 753 (50.12) | 1910 (44.38) | 1875 (27.09) | 1388 (56.80) | 3078 (37.93) | 815 (16.05) |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |
| Yes | 279 (21.80) | 141 (5.72) | 148 (2.93) | 151 (13.39) | 417 (5.47) | 229 (7.64) |
| No | 1358 (78.20) | 4245 (94.28) | 7692 (97.07) | 2273 (86.61) | 7768 (94.53) | 4760 (92.36) |
| ***Moderate leisure activity*** |  |  |  |  |  |  |
| Yes | 379 (24.12) | 283 (10.52) | 767 (11.46) | 219 (13.33) | 552 (7.14) | 648 (16.73) |
| No | 1258 (75.88) | 4103 (89.48) | 7073 (88.54) | 2205 (86.67) | 7633 (92.86) | 4341 (83.27) |
| ***Obesity*** |  |  |  |  |  |  |
| Yes | 260 (12.06) | 319 (6.05) | 511 (5.94) | 54 (0.94) | 552 (5.69) | 294 (4.67) |
| No | 1370 (87.94) | 4007 (93.95) | 7242 (94.06) | 2308 (99.06) | 7461 (94.31) | 4630 (95.33) |

**Table 6: Distribution of Hypercholesterolemia by socio-economic variables**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Maldives**  **(not available)** | **Sri Lanka**  **(n=4547)** | **Myanmar**  **(n=7843)** | **Timor-Leste**  **(n=2489)** | **Bangladesh**  **(n=8185)** | **Nepal**  **(n=5141)** |
|  | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** |
| **Socio-economic background** |  |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |
| 18-29 | - | 667 (33.78) | 739 (15.00) | 642 (44.64) | 1942 (28.33) | 1181 (40.41) |
| 30-44 | - | 1601 (29.21) | 2976 (45.57) | 912 (31.40) | 3505 (38.48) | 1944 (31.17) |
| 45-59 | - | 1512 (26.30) | 3291 (32.15) | 565 (12.67) | 2152 (25.34) | 1349 (19.57) |
| 60 or above | - | 767 (10.71) | 837 (7.29) | 370 (11.29) | 586 (7.84) | 667 (8.85) |
| ***Sex*** |  |  |  |  |  |  |
| Male | - | 1742 (49.08) | 2675 (49.39) | 1022 (36.20) | 3804 (45.46) | 1823 (46.53) |
| Female | - | 2805 (50.92) | 5168 (50.61) | 1467 (63.80) | 4381 (54.54) | 3318 (53.47) |
| ***Highest level of education*** |  |  |  |  |  |  |
| No formal schooling to basic literacy | - | 227 (3.60) | 1166 (13.26) | 841 (32.13) | 2476 (33.61) | 78 (2.23) |
| Less than primary to Primary school completed | - | 645 (11.06) | 4703 (57.84) | 902 (39.20) | 3735 (45.77) | 1450 (42.46) |
| Secondary school completed to High school completed | - | 1308 (27.17) | 1440 (20.52) | 618 (26.49) | 1397 (15.98) | 1376 (50.24) |
| College or higher | - | 2358 (58.17) | 511 (8.38) | 83 (2.18) | 556 (4.63) | 166 (5.07) |
| ***Marital status*** |  |  |  |  |  |  |
| Currently Married | - | - | 5957 (77.21) | 1960 (66.65) | 7250 (87.84) | 4535 (83.93) |
| Not Married | - | - | 1883 (22.79) | 522 (33.35) | 935 (12.16) | 606 (16.07) |
| ***Work status*** |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | - | 1088 (28.06) | 874 (12.12) | 411 (13.93) | 3593 (42.59) | 456 (10.35) |
| Home maker/Other voluntary work | - | 2513 (48.37) | 6376 (80.14) | 1522 (69.15) | 4144 (52.79) | 4174 (73.96) |
| Unemployed | - | 940 (23.58) | 587 (7.75) | 453 (16.93) | 445 (4.61) | 505 (15.69) |
| **Food intake** |  |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |
| Daily/Yes | - | 552 (14.51) | 1754 (25.80) | 776 (45.90) | 1923 (22.98) | 1012 (18.02) |
| Less than daily/No | - | 3992 (85.49) | 6087 (74.20) | 1710 (54.10) | 6262 (77.02) | 4129 (81.98) |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |
| Yes | - | 4343 (97.00) | 5784 (74.53) | 1966 (93.59) | 5131 (62.71) | 3702 (76.68) |
| No | - | 140 (3.00) | 1777 (25.47) | 339 (6.41) | 2824 (37.29) | 1212 (23.32) |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |
| Yes | - | 4525 (99.84) | 7722 (98.73) | 2373 (99.43) | 8156 (99.86) | 5094 (99.64) |
| No | - | 8 (0.16) | 105 (1.27) | 27 (0.57) | 19 (0.14) | 20 (0.36) |
| ***Adding salt when eating*** |  |  |  |  |  |  |
| Always/Often | - | 1038 (22.50) | - | 2109 (76.78) | 3859 (49.18) | 353 (5.95) |
| Sometimes/Rarely | - | 1054 (25.42) | - | 303 (22.12) | 1474 (19.63) | 2782 (54.61) |
| Never | - | 2402 (52.08) | - | 68 (1.10) | 2849 (31.19) | 1993 (39.44) |
| ***Oil used most often*** |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | - | 3930 (87.51) | 3597 (53.40) | - | 652 (9.61) | 2060 (43.87) |
| Soybean/Vegetable/ Palm | - | 516 (11.09) | 3424 (39.40) | 2335 (97.51) | 7340 (88.93) | 2716 (51.19) |
| Others/ Olive/Corn /Not specific | - | 80 (1.40) | 688 (7.20) | 145 (2.49) | 193 (1.46) | 365 (4.94) |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |
| Yes | - | 1280 (35.09) | 1165 (15.92) | 253 (18.71) | 2159 (24.34) | 1323 (32.63) |
| No | - | 3209 (64.91) | 6573 (84.08) | 1760 (81.29) | 5747 (75.66) | 3576 (67.37) |
| **Physical activity** |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |
| Yes | - | 930 (22.73) | 1343 (22.35) | 1068 (46.52) | 2173 (30.12) | 2486 (45.29) |
| No | - | 3609 (77.27) | 6496 (77.65) | 1416 (46.52) | 6012 (69.88) | 2655 (54.71) |
| ***Moderate activity at work*** |  |  |  |  |  |  |
| Yes | - | 2551 (55.91) | 4838 (62.52) | 1777 (86.25) | 6382 (81.64) | 4233 (80.59) |
| No | - | 1988 (44.09) | 3001 (37.48) | 707 (13.75) | 1803 (18.36) | 908 (19.41) |
| ***Active transport*** |  |  |  |  |  |  |
| Yes | - | 2573 (55.80) | 5967 (72.81) | 1048 (42.66) | 5107 (62.07) | 4305 (84.01) |
| No | - | 1966 (44.20) | 1872 (27.19) | 1436 (57.34) | 3078 (37.93) | 836 (15.99) |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |
| Yes | - | 144 (5.71) | 143 (2.79) | 159 (13.86) | 417 (5.47) | 233 (7.43) |
| No | - | 4395 (94.29) | 7696 (97.21) | 2325 (86.14) | 7768 (94.53) | 4908 (92.57) |
| ***Moderate leisure activity*** |  |  |  |  |  |  |
| Yes | - | 289 (10.43) | 771 (11.54) | 229 (13.57) | 552 (7.14) | 662 (16.60) |
| No | - | 4250 (89.57) | 7068 (88.46) | 2255 (86.43) | 7633 (92.86) | 4479 (83.40) |
| ***Obesity*** |  |  |  |  |  |  |
| Yes | - | 4150 (94.03) | 513 (6.00) | 56 (0.96) | 552 (5.69) | 301 (4.63) |
| No | - | 328 (5.97) | 7235 (94.00) | 2364 (99.04) | 7461 (94.31) | 4774 (95.37) |

**Table 7: Weighted descriptive statistics of socio-economic variables and Hypertension status in Southeast Asian adults**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Told had a high blood pressure (Hypertension), weighted n (%)** | | | | | | | | | | | |
|  | **Maldives**  **(n = 420)** | | **Sri Lanka**  **(n =1376)** | | **Myanmar**  **(n= 2488)** | | **Timor-Leste**  **(n = 698)** | | **Bangladesh**  **(N = 1834)** | | **Nepal**  **(N = 1542)** | |
|  | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** |
| **Socio-economic background** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |  |  |  |  |  |  |
| 18-29 | 43 (7.95) | <0.001 | 64 (9.06) | <0.001 | 89 (10.13) | <0.001 | 83 (46.26) | 0.393 | 172 (8.84) | <0.001 | 167 (15.74) | <0.001 |
| 30-44 | 94 (18.15) |  | 324 (19.75) |  | 719 (23.68) |  | 259 (31.47) |  | 713 (19.26) |  | 496 (26.64) |  |
| 45-59 | 215 (47.06) |  | 578 (37.34) |  | 1294 (38.61) |  | 196 (38.73) |  | 716 (29.73) |  | 554 (40.83) |  |
| 60 or above | 68 (60.88) |  | 410 (50.63) |  | 386 (45.66) |  | 160 (38.37) |  | 233 (37.66) |  | 325 (44.56) |  |
| ***Sex*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 154 (20.45) | 0.015 | 541 (23.30) | 0.506 | 793 (27.14) | 0.469 | 290 (45.80) | <0.001 | 733 (16.82) | <0.001 | 731 (33.42) | <0.001 |
| Female | 266 (15.69) |  | 835 (24.27) |  | 1695 (28.74) |  | 408 (28.03) |  | 1101 (23.40) |  | 811 (20.66) |  |
| ***Highest level of education*** |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal schooling to basic literacy | 209 (43.22) | <0.001 | 92 (35.45) | <0.001 | 422 (34.67) | 0.133 | 259 (49.66) | <0.001 | 587 (23.38) | 0.004 | 24 (25.89) | 0.004 |
| Less than primary to Primary school completed | 113 (24.07) |  | 227 (30.48) |  | 1484 (27.29) |  | 251 (43.71) |  | 755 (18.28) |  | 450 (29.49) |  |
| Secondary school completed to High school completed | 71 (9.43) |  | 417 (25.93) |  | 443 (28.69) |  | 161 (22.35) |  | 346 (20.53) |  | 323 (18.62) |  |
| College or higher | 25 (14.55) |  | 633 (20.64) |  | 131 (19.76) |  | 13 (13.36) |  | 144 (20.04) |  | 48 (23.57) |  |
| ***Marital status*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Currently Married | 306 (20.32) | 0.005 | - |  | 1889 (29.13) | <0.001 | 568 (31.87) | 0.045 | 1633 (20.48) | 0.781 | 1375 (27.81) | 0.020 |
| Not Married | 112 (14.32) |  | - |  | 598 (23.90) |  | 128 (53.34) |  | 201 (19.89) |  | 167 (20.45) |  |
| ***Work status*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 129 (16.43) | 0.003 | 290 (20.83) | <0.001 | 215 (22.64) | 0.018 | 128 (38.22) | <0.001 | 713 (17.17) | <0.001 | 160 (29.88) | <0.001 |
| Homemaker/Other voluntary work | 212 (22.69) |  | 799 (27.02) |  | 2047 (28.27) |  | 431 (46.96) |  | 1000 (22.59) |  | 1267 (28.34) |  |
| Unemployed | 77 (14.05) |  | 287 (20.75) |  | 225 (33.00) |  | 110 (11.89) |  | 120 (25.40) |  | 114 (16.30) |  |
| **Food intake** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Daily/Yes | 51 (15.25) | 0.198 | 152 (23.41) | 0.834 | 489 (27.05) | 0.565 | 198 (36.46) | 0.182 | 282 (12.19) | <0.001 | 369 (34.55) | <0.001 |
| Less than daily/No | 369 (18.78) |  | 1224 (23.86) |  | 1998 (28.24) |  | 500 (42.80) |  | 1552 (22.86) |  | 1173 (24.84) |  |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 319 (18.58) | 0.150 | 1316 (23.82) | 0.517 | 1844 (27.47) | 0.530 | 558 (41.48) | 0.009 | 1194 (21.03) | 0.438 | 1102 (25.73) | 0.199 |
| No | 71 (15.89) |  | 42 (21.36) |  | 553 (29.14) |  | 95 (22.21) |  | 605 (19.88) |  | 361 (28.74) |  |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 361 (18.54) | 0.029 | 1370 (23.79) | 0.597 | 2460 (28.00) | 0.810 | 673 (35.31) | 0.024 | 1830 (20.43) | 0.982 | 1527 (26.53) | 0.396 |
| No | 42 (12.34) |  | 3 (17.30) |  | 25 (26.26) |  | 7 (12.62) |  | 3 (20.11) |  | 6 (17.44) |  |
| ***Adding salt when eating*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Always/Often | - |  |  |  | - | - | 575 (38.92) | 0.445 | 786 (18.79) | 0.066 | 99 (22.92) | <0.001 |
| Sometimes/Rarely | - |  |  |  | - |  | 98 (43.31) |  | 330 (20.97) |  | 779 (23.45) |  |
| Never | - |  |  |  | - |  | 25 (33.05) |  | 716 (22.53) |  | 660 (31.47) |  |
| ***Oil used most often*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 102 (18.86) | 0.582 | 1178 (23.53) | <0.001 | 1243 (30.41) | 0.027 | - | 0.003 | 136 (19.03) | 0.336 | 572 (25.74) | 0.355 |
| Soybean/Vegetable/ Palm | 244 (17.26) |  | 156 (24.78) |  | 997 (24.82) |  | 1752 (40.29) |  | 1662 (20.65) |  | 868 (27.68) |  |
| Others/ Olive/Corn /Not specific | 67 (20.11) |  | 41 (46.71) |  | 209 (26.91) |  | 115 (17.55) |  | 36 (15.11) |  | 102 (22.79) |  |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 96 (14.65) | <0.001 | 468 (27.70) | 0.012 | 340 (21.46) | 0.030 | 69 (26.40) | 0.448 | 395 (16.55) | 0.002 | 421 (25.96) | 0.434 |
| No | 284 (22.27) |  | 1330 (32.24) |  | 2110 (29.06) |  | 497 (28.25) |  | 1382 (21.68) |  | 1068 (27.79) |  |
| **Physical activity** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 20 (12.90) | 0.175 | 256 (21.46) | 0.075 | 317 (18.98) | 0.008 | 277 (45.28) | 0.006 | 322 (13.66) | <0.001 | 706 (26.53) | 0.951 |
| No | 398 (18.30) |  | 1119 (24.52) |  | 2169 (30.56) |  | 421 (34.07) |  | 1512 (23.32) |  | 836 (26.66) |  |
| ***Moderate activity at work*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 67 (18.28) | 0.877 | 780 (24.66) | 0.193 | 1471 (27.34) | 0.537 | 492 (42.43) | 0.004 | 1362 (19.53) | 0.006 | 1233 (25.72) | 0.099 |
| No | 351 (17.86) |  | 595 (22.68) |  | 1015 (28.88) |  | 206 (22.07) |  | 472 (24.32) |  | 309 (30.36) |  |
| ***Active transport*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 232 (17.15) | 0.362 | 721 (22.11) | 0.007 | 1812 (26.23) | <0.001 | 292 (29.89) | 0.001 | 1102 (18.96) | 0.007 | 1274 (26.34) | 0.567 |
| No | 188 (18.97) |  | 654 (25.99) |  | 674 (32.50) |  | 406 (46.45) |  | 732 (22.79) |  | 268 (27.94) |  |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 45 (12.23) | 0.006 | 30 (17.20) | 0.099 | 28 (20.61) | 0.200 | 41 (67.59) | 0.031 | 86 (18.35) | 0.433 | 48 (16.59) | 0.010 |
| No | 372 (19.54) |  | 1345 (24.23) |  | 2458 (28.14) |  | 657 (35.53) |  | 1748 (20.53) |  | 1494 (27.42) |  |
| ***Moderate leisure activity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 100 (17.55) | 0.763 | 82 (19.41) | 0.097 | 236 (30.72) | 0.501 | 52 (68.56) | 0.027 | 108 (17.61) | 0.220 | 199 (25.01) | 0.454 |
| No | 319 (18.26) |  | 1293 (24.34) |  | 2250 (27.55) |  | 646 (35.52) |  | 1726 (20.62) |  | 1343 (26.92) |  |
| ***Obesity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 117 (39.89) | <0.001 | 166 (51.35) | <0.001 | 309 (57.60) | <0.001 | 28 (42.14) | 0.980 | 243 (44.56) | <0.001 | 151 (54.39) | <0.001 |
| No | 299 (14.99) |  | 1182 (22.63) |  | 2173 (26.34) |  | 661 (42.45) |  | 1559 (19.17) |  | 1389 (25.56) |  |

**Table 8: Weighted descriptive statistics of socio-economic variables associated with Hyperglycemia status in Southeast Asian adults**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Told had a high blood glucose (Hyperglycemia), weighted n (%)** | | | | | | | | | | | |
|  | **Maldives**  **(N = 107)** | | **Sri Lanka**  **(N =330)** | | **Myanmar**  **(N=513)** | | **Timor-Leste**  **(n =61)** | | **Bangladesh**  **(N = 1705)** | | **Nepal**  **(N = 308)** | |
|  | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** | **n (%)** | **P-value** |
| **Socio-economic background** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |  |  |  |  |  |  |
| 18-29 | 12 (1.87) | <0.001 | 12 (1.89) | <0.001 | 8 (1.12) | <0.001 | 4 (0.66) | 0.058 | 436 (4.48) | <0.001 | 23 (2.40) | <0.001 |
| 30-44 | 16 (2.83) |  | 74 (5.56) |  | 119 (4.16) |  | 24 (1.19) |  | 660 (8.97) |  | 105 (6.54) |  |
| 45-59 | 56 (10.09) |  | 156 (11.00) |  | 283 (8.40) |  | 21 (2.58) |  | 470 (11.27) |  | 123 (10.49) |  |
| 60 or above | 23 (20.49) |  | 88 (11.77) |  | 103 (11.49) |  | 12 (1.37) |  | 139 (14.38) |  | 57 (8.00) |  |
| ***Sex*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 27 (2.48) | 0.010 | 125 (6.18) | 0.558 | 111 (4.51) | <0.001 | 27 (0.99) | 0.396 | 834 (9.57) | 0.084 | 130 (6.25) | 0.275 |
| Female | 80 (4.94) |  | 205 (6.64) |  | 402 (6.65) |  | 34 (1.42) |  | 871 (7.98) |  | 178 (5.33) |  |
| ***Highest level of education*** |  |  |  |  |  |  |  |  |  |  |  |  |
| No formal schooling to basic literacy | 57 (8.41) | <0.001 | 14 (4.52) | 0.063 | 62 (6.03) | 0.108 | 18 (0.98) | 0.862 | 409 (8.40) | <0.001 | 7 (15.97) | 0.114 |
| Less than primary to Primary school completed | 30 (5.25) |  | 47 (8.04) |  | 277 (4.84) |  | 29 (1.21) |  | 725 (7.93) |  | 97 (5.88) |  |
| Secondary school completed to High school completed | 12 (1.84) |  | 108 (7.65) |  | 132 (6.74) |  | 12 (1.17) |  | 372 (8.61) |  | 64 (4.77) |  |
| College or higher | 8 (3.81) |  | 160 (5.64) |  | 40 (7.14) |  | 1 (2.3) |  | 197 (19.15) |  | 17 (8.39) |  |
| ***Marital status*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Currently Married | 82 (4.69) | 0.008 | - | - | 409 (5.94) | 0.019 | 54 (1.35) | 0.336 | 1570 (8.97) | 0.161 | 287 (6.51) | <0.001 |
| Not Married | 24 (2.15) |  | - |  | 104 (4.39) |  | 7 (0.76) |  | 198 (6.79) |  | 21 (1.87) |  |
| ***Work status*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 21 (2.49) | 0.041 | 71 (6.26) | 0.061 | 50 (4.11) | 0.259 | 11 (2.23) | 0.203 | 771 (9.52) | 0.064 | 38 (7.24) | 0.065 |
| Home maker/Other voluntary work | 49 (4.33) |  | 190 (7.36) |  | 408 (5.70) |  | 38 (0.92) |  | 817 (7.84) |  | 239 (6.08) |  |
| Unemployed | 37 (5.86) |  | 69 (4.70) |  | 55 (6.74) |  | 11 (0.96) |  | 116 (11.05) |  | 30 (3.29) |  |
| **Food intake** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Daily/Yes | 12 (2.89) | 0.405 | 33 (5.59) | 0.419 | 54 (4.58) | 0.270 | 19 (0.82) | 0.144 | 374 (8.33) | 0.657 | 63 (7.94) | 0.050 |
| Less than daily/No | 95 (3.96) |  | 297 (6.55) |  | 459 (5.93) |  | 42 (1.44) |  | 1331 (8.82) |  | 245 (5.28) |  |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 75 (3.32) | 0.037 | 316 (6.43) | 0.275 | 405 (5.24) | 0.231 | 48 (1.07) | 0.230 | 1150 (7.46) | 0.015 | 232 (6.17) | 0.195 |
| No | 25 (5.99) |  | 10 (4.26) |  | 100 (7.24) |  | 11 (2.43) |  | 518 (9.61) |  | 62 (4.51) |  |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 85 (3.60) | 0.262 | 329 (6.40) | 0.194 | 508 (5.63) | 0.222 | 59 (1.27) | 0.099 | 1693 (8.71) | 0.892 | 305 (5.72) | 0.2418 |
| No | 19 (5.31) |  | 1 (20.62) |  | 5 (2.29) |  | 2 (6.44) |  | 10 (7.80) |  | 2 (13.66) |  |
| ***Adding salt when eating*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Always/Often | - |  | 45 (3.36) | <0.001 | - |  | 56 (1.38) | 0.082 | 752 (7.96) | 0.061 | 22 (6.31) | 0.513 |
| Sometimes/Rarely | - |  | 72 (5.90) |  | - |  | 4 (0.37) |  | 290 (8.02) |  | 165 (6.21) |  |
| Never | - |  | 212 (8.02) |  | - |  | 1 (1.54) |  | 662 (10.32) |  | 121 (5.06) |  |
| ***Oil used most often*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 25 (4.07) | 0.883 | 289 (6.59) | 0.067 | 292 (6.96) | 0.026 | - | 0.321 | 107 (9.06) | 0.625 | 115 (5.53) | 0.755 |
| Soybean/Vegetable/ Palm | 60 (3.77) |  | 31 (4.79) |  | 165 (3.61) |  | 58 (1.12) |  | 1570 (8.71) |  | 174 (6.06) |  |
| Others/ Olive/Corn /Not specific | 7 (4.70) |  | 10 (12.37) |  | 45 (5.95) |  | 3 (2.37) |  | 28 (5.79) |  | 19 (4.91) |  |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 17 (2.07) | 0.003 | 88 (5.89) | 0.442 | 99 (4.82) | 0.557 | 7 (1.44) | 0.999 | 484 (9.69) | 0.304 | 87 (6.78) | 0.322 |
| No | 73 (5.12) |  | 237 (6.65) |  | 410 (5.75) |  | 42 (1.44) |  | 1175 (8.48) |  | 204 (5.32) |  |
| **Physical activity** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 3 (1.53) | 0.203 | 40 (4.22) | 0.005 | 29 (2.19) | <0.001 | 28 (4.22) | 0.003 | 323 (6.40) | <0.001 | 96 (6.71) | 0.145 |
| No | 104 (3.91) |  | 290 (7.05) |  | 484 (6.58) |  | 33 (0.68) |  | 1382 (9.70) |  | 212 (4.6) |  |
| ***Moderate activity at work*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 11 (3.01) | 0.514 | 178 (6.71) | 0.565 | 257 (4.73) | 0.015 | 34 (0.72) | 0.003 | 1247 (8.00) | 0.002 | 228 (5.72) | 0.871 |
| No | 95 (3.87) |  | 152 (6.19) |  | 256 (7.01) |  | 30 (5.42) |  | 458 (11.83) |  | 80 (5.91) |  |
| ***Active transport*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 60 (3.07) | 0.135 | 172 (5.62) | 0.039 | 366 (4.59) | <0.001 | 19 (1.29) | 0.565 | 1074 (8.81) | 0.791 | 258 (5.91) | 0.423 |
| No | 47 (4.41) |  | 158 (7.42) |  | 147 (8.27) |  | 42 (1.05) |  | 631 (8.54) |  | 50 (4.94) |  |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 15 (3.69) | 0.954 | 4 (2.64) | 0.133 | 5 (0.83) | <0.002 | 6 (1.13) | 0.959 | 113 (11.61) | 0.182 | 11 (3.36) | 0.209 |
| No | 92 (3.77) |  | 330 (6.65) |  | 508 (5.73) |  | 55 (1.16) |  | 1592 (8.54) |  | 297 (5.95) |  |
| ***Moderate leisure activity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 24 (3.45) | 0.709 | 14 (3.42) | 0.025 | 73 (8.16) | 0.013 | 4 (0.80) | 0.500 | 114 (9.00) | 0.873 | 35 (4.65) | 0.380 |
| No | 83 (3.85) |  | 316 (6.77) |  | 440 (5.25) |  | 57 (1.12) |  | 1591 (8.68) |  | 273 (5.98) |  |
| ***Obesity*** |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 36 (9.82) | <0.001 | 35 (9.94) | 0.017 | 71 (12.04) | <0.001 | 5 (8.46) | <0.001 | 161 (16.5) | <0.001 | 32 (11.77) | 0.005 |
| No | 68 (2.85) |  | 289 (6.18) |  | 440 (5.20) |  | 56 (1.10) |  | 1481 (8.27) |  | 274 (5.50) |  |

**Table 9: Weighted descriptive statistics of socio-economic variables and Hypercholesterolemia status in Southeast Asian adults**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **Told had a high total cholesterol (hypercholesterolemia), weighted n (%)** | | | | | | | | | | | | |
|  | **Maldives**  **(not available)** | | **Sri Lanka**  **(N =1029)** | | **Myanmar**  **(N=3171)** | | **Timor-Leste**  **(N = 221)** | | **Bangladesh**  **(N = 3036)** | | | **Nepal**  **(N = 649)** | |
|  | n (%) | P-value | n (%) | P-value | n (%) | P-value | n (%) | P-value | n (%) | | P-value | n (%) | P-value |
| **Socio-economic background** |  |  |  |  |  |  |  |  |  | |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| 18-29 | - | - | 91 (13.03) | <0.001 | 148 (18.45) | <0.001 | 51 (7.50) | <0.001 | 656 (19.42) | | <0.001 | 67 (6.05) | <0.001 |
| 30-44 | - |  | 309 (18.55) |  | 983 (30.07) |  | 77 (35.84) |  | 1227 (25.01) | |  | 215 (11.63) |  |
| 45-59 | - |  | 425 (27.39) |  | 1598 (44.70) |  | 57 (6.45) |  | 926 (34.17) | |  | 239 (16.06) |  |
| 60 or above | - |  | 204 (27.21) |  | 442 (48.91) |  | 36 (17.46) |  | 227 (35.73) | |  | 128 (21.63) |  |
| ***Sex*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Male | - | - | 302 (16.15) | <0.001 | 829 (29.90) | <0.001 | 59 (14.33) | <0.001 | 1380 (25.01) | | 0.038 | 173 (7.52) | <0.001 |
| Female | - |  | 727 (23.87) |  | 2342 (38.80) |  | 162 (22.78) |  | 1656 (27.90) | |  | 476 (14.38) |  |
| ***Highest level of education*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| No formal schooling to basic literacy | - | - | 52 (23.00) | 0.386 | 381 (26.71) | 0.019 | 78 (8.40) | 0.013 | 838 (26.15) | | 0.200 | 7 (8.25) | 0.058 |
| Less than primary to Primary school completed | - |  | 134 (20.21) |  | 1831 (34.15) |  | 75 (14.15) |  | 1345 (25.97) | |  | 153 (10.95) |  |
| Secondary school completed to High school completed | - |  | 272 (18.07) |  | 702 (39.97) |  | 61 (34.36) |  | 567 (27.24) | |  | 139 (7.41) |  |
| College or higher | - |  | 568 (20.54) |  | 242 (33.99) |  | 6 (5.48) |  | 279 (33.83) | |  | 22 (13.37) |  |
| ***Marital status*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Currently Married | - | - | - |  | 2338 (34.36) | 0.934 | 178 (24.63) | 0.009 | 2672 (26.44) | | 0.618 | 567 (11.81) | 0.039 |
| Not Married | - |  | - |  | 831 (34.56) |  | 43 (3.07) |  | 364 (27.67) | |  | 82 (7.95) |  |
| ***Work status*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Employee/Business/Agriculture/Labour | - | - | 221 (17.84) | 0.018 | 324 (33.52) | 0.734 | 44 (44.33) | 0.007 | 1334 (25.95) | | <0.001 | 57 (10.73) | 0.131 |
| Home maker/Other voluntary work | - |  | 610 (22.21) |  | 2572 (34.26) |  | 126 (15.35) |  | 1533 (27.22) | |  | 540 (12.06) |  |
| Unemployed | - |  | 197 (17.76) |  | 272 (37.20) |  | 36 (4.12) |  | 168 (25.27) | |  | 51 (7.47) |  |
| **Food intake** |  |  |  |  |  |  |  |  |  | |  |  |  |
| ***Current smoking*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Daily/Yes | - |  | 81 (13.95) | <0.001 | 604 (32.06) | 0.072 | 60 (19.92) | <0.001 | 662 (23.08) | | 0.007 | 120 (9.88) | 0.314 |
| Less than daily/No | - |  | 947 (20.96) |  | 2565 (35.21) |  | 161 (15.26) |  | 2374 (27.63) | |  | 529 (11.48) |  |
| ***Fruit eaten in a week*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 989 (20.01) | 0.373 | 2430 (36.37) | 0.100 | 187 (18.59) | <0.001 | 1998 (28.40) | | 0.004 | 479 (11.41) | 0.606 |
| No | - |  | 22 (15.77) |  | 641 (29.71) |  | 21 (5.02) |  | 956 (23.65) | |  | 136 (10.46) |  |
| ***Vegetables eaten in a week*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 1024 (19.92) | 0.969 | 3125 (34.39) | 0.886 | 211 (18.37) | 0.097 | 3021 (26.60) | | 0.913 | 644 (11.19) | 0.603 |
| No | - |  | 1 (20.62) |  | 38 (32.77) |  | 2 (5.52) |  | 11 (28.50) | |  | 2 (7.23) |  |
| ***Adding salt when eating*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Always/Often | - | - | 224 (19.06) | 0.188 | - |  | 196 (10.39) | <0.001 | 1372 (24.85) | | 0.071 | 35 (11.06) | 0.189 |
| Sometimes/Rarely | - |  | 214 (17.59) |  | - |  | 18 (42.18) |  | 524 (28.82) | |  | 333 (10.21) |  |
| Never | - |  | 578 (21.55) |  | - |  | 7 (9.64) |  | 1139 (27.96) | |  | 281 (12.62) |  |
| ***Oil used most often*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | - | - | 917 (20.65) | 0.028 | 1527 (35.41) | 0.434 | - |  | 187 (21.67) | | 0.063 | 247 (10.76) | 0.822 |
| Soybean/Vegetable/ Palm | - |  | 89 (14.86) |  | 1282 (32.71) |  | 215 (17.80) | <0.001 | 2775 (27.07) | |  | 353 (11.60) |  |
| Others/ Olive/Corn /Not specific | - |  | 20 (24.75) |  | 299 (35.91) |  | 6 (2.63) |  | 74 (29.34) | |  | 49 (10.84) |  |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 280 (19.63) | 0.743 | 521 (38.44) | 0.077 | 39 (8.90) | 0.161 | 829 (25.32) | | 0.337 | 144 (7.02) | <0.001 |
| No | - |  | 742 (20.22) |  | 2601 (33.61) |  | 150 (27.30) |  | 2110 (27.07) | |  | 471 (12.95) |  |
| **Physical activity** |  |  |  |  |  |  |  |  |  | |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 168 (15.38) | <0.001 | 353 (22.62) | <0.001 | 81 (8.72) | 0.002 | 641 (21.98) | | <0.001 | 235 (9.31) | 0.027 |
| No | - |  | 858 (21.25) |  | 2815 (37.80) |  | 140 (27.40) |  | 2395 (28.57) | |  | 414 (12.75) |  |
| ***Moderate activity at work*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 608 (20.81) | 0.220 | 1838 (33.57) | 0.414 | 145 (18.52) | 0.062 | 2294 (25.39) | | <0.001 | 528 (10.99) | 0.602 |
| No | - |  | 418 (18.78) |  | 1330 (35.79) |  | 76 (10.47) |  | 742 (31.90) | |  | 121 (12.02) |  |
| ***Active transport*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 626 (20.73) | 0.259 | 2347 (33.70) | 0.490 | 62 (20.52) | 0.107 | 1814 (24.99) | | 0.008 | 530 (11.20) | 0.991 |
| No | - |  | 400 (18.89) |  | 821 (36.28) |  | 159 (15.10) |  | 1222 (29.21) | |  | 119 (11.18) |  |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |  |  | |  |  |  |  |
| Yes | - | - | 21 (10.04) | 0.007 | 43 (22.99) | 0.006 | 14 (3.17) | 0.048 | 167 (24.29) | | 0.485 | 10 (3.33) | <0.001 |
| No | - |  | 1005 (20.51) |  | 3125 (34.73) |  | 207 (19.70) |  | 2869 (26.72) | |  | 639 (11.82) |  |
| ***Moderate leisure activity*** |  |  |  |  |  |  |  |  | |  |  |  |  |
| Yes | - | - | 59 (15.97) | 0.103 | 335 (39.36) | 0.139 | 18 (2.06) | 0.003 | 213 (27.40) | | 0.787 | 79 (7.87) | 0.018 |
| No | - |  | 967 (20.38) |  | 2833 (33.76) |  | 203 (19.82) |  | 2823 (26.53) | |  | 570 (11.85) |  |
| ***Obesity*** |  |  |  |  |  |  |  |  |  | |  |  |  |
| Yes | - | - | 74 (20.04) | 0.877 | 283 (45.73) | <0.001 | 10 (17.57) | 0.959 | 258 (38.94) | | <0.001 | 69 (21.37) | <0.001 |
| No | - |  | 928 (19.60) |  | 2832 (33.43) |  | 189 (17.21) |  | 2678 (25.38) | |  | 564 (10.46) |  |

**Table 10: Weighted descriptive statistics of socio-economic variables and three major NCDs among Southeast Asian adults.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Hypertension** | | | | **Hyperglycemia** | | | **Hypercholesterolemia** | | |
|  | **Total**  **(n = 16927)**  **n (%)** | **Yes**  **(n = 4982)**  **n (%)** | **P-value** | **Total**  **(n = 16302)**  **n (%)** | | **Yes**  **(n = 1011)**  **n (%)** | **P-value** | **Total**  **(n = 14879)**  **n (%)** | **Yes**  **(n = 4421)**  **n (%)** | **P-value** |
| **Socio-economic background** |  |  |  |  | |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  | |  |  |  |  |  |
| 18-29 | 2722 (19.38) | 279 (10.97) | <0.001 | 2593 (18.94) | | 36 (1.35) | <0.001 | 2048 (19.21) | 290 (16.17) | <0.001 |
| 30-44 | 6170 (42.05) | 1396 (23.25) |  | 5955 (42.34) | | 233 (4.31) |  | 5489 (42.23) | 1369 (28.51) |  |
| 45-59 | 5897 (30.50) | 2283 (38.42) |  | 5713 (30.75) | | 516 (8.79) |  | 5368 (30.58) | 2080 (41.46) |  |
| 60 or above | 2138 (8.08) | 1024 (46.75) |  | 2052 (7.97) | | 226 (11.35) |  | 1974 (7.98) | 682 (42.41) |  |
| ***Sex*** |  |  |  |  | |  |  |  |  |  |
| Male | 6242 (50.31) | 1778 (26.84) | 0.502 | 5984 (49.82) | | 290 (4.78) | <0.001 | 5439 (49.71) | 1190 (26.81) | <0.001 |
| Female | 10685 (49.69) | 3204 (27.96) |  | 10329 (50.18) | | 721 (6.61) |  | 9440 (50.29 | 3231 (35.65) |  |
| ***Highest level of education*** |  |  |  |  | |  |  |  |  |  |
| No formal schooling to basic literacy | 2719 (11.74) | 982 (35.46) | 0.006 | 2627 (11.81) | | 151 (5.73) | 0.037 | 2234 (11.59) | 511 (25.67) | <0.001 |
| Less than primary to Primary school completed | 6797 (48.22) | 2075 (27.69) |  | 6602 (48.60) | | 383 (4.94) |  | 6250 (48.22) | 2040 (33.19) |  |
| Secondary school completed to High school completed | 4118 (22.13) | 1092 (28.04) |  | 3958 (22.01) | | 264 (6.86) |  | 3366 (21.96) | 1035 (34.40) |  |
| College or higher | 3207 (17.90) | 802 (20.49) |  | 3043 (17.57) | | 209 (6.25) |  | 2952 (18.23) | 816 (25.37) |  |
| ***Marital status*** |  |  |  |  | |  |  |  |  |  |
| Currently Married | 9194 (76.97) | 2763 (29.23) | <0.001 | 8992 (77.11) | | 545 (5.86) | 0.012 | 7917 (77.07) | 2516 (34.14) | 0.816 |
| Not Married | 2981 (23.03) | 838 (24.88) |  | 2912 (22.89) | | 135 (4.30) |  | 2405 (22.93) | 874 (33.61) |  |
| ***Work status*** |  |  |  |  | |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 3085 (15.32) | 862 (22.30) | 0.003 | 2959 (15.23) | | 153 (4.86) | 0.505 | 2373 (15.35) | 589 (27.90) | 0.064 |
| Home maker/Other voluntary work | 11364 (73.69) | 3489 (28.47) |  | 10963 (73.97) | | 685 (5.84) |  | 10411 (73.62) | 3308 (32..36) |  |
| Unemployed | 2350 (10.98) | 699 (27.42) |  | 2265 (10.80) | | 172 (5.81) |  | 1980 (11.03) | 505 (28.12) |  |
| **Food intake** |  |  |  |  | |  |  |  |  |  |
| ***Current smoking*** |  |  |  |  | |  |  |  |  |  |
| Daily/Yes | 3434 (24.00) | 890 (26.92) | 0707 | 3292 (23.91) | | 118 (4.59) | 0.207 | 3082 (23.98) | 745 (29.49) | 0.140 |
| Less than daily/No | 13481 (76.00) | 4091 (27.55) |  | 13007 (76.09) | | 893 (6.03) |  | 11789 (76.02) | 3673 (31.75) |  |
| ***Fruit eaten in a week*** |  |  |  |  | |  |  |  |  |  |
| Yes | 13707 (79.37) | 4037 (26.94) | 0.452 | 13166 (79.17) | | 844 (5.47) | 0.369 | 12093 (79.39) | 3606 (31.92) | 0.448 |
| No | 2580 (20.63) | 761 (28.92) |  | 2537 (20.83) | | 146 (7.13) |  | 2256 (20.61) | 684 (29.09) |  |
| ***Vegetables eaten in a week*** |  |  |  |  | |  |  |  |  |  |
| Yes | 16425 (99.00) | 4864 (27.36) | 0.813 | 15825 (98.99) | | 981 (5.74) | 0.277 | 14620 (98.95) | 4360 (31.20) | 0.920 |
| No | 319 (1.00) | 77 (25.76) |  | 315 (1.01) | | 27 (2.89) |  | 140 (1.05) | 41 (32.23) |  |
| ***Adding salt when eating*** |  |  |  |  | |  |  |  |  |  |
| Always/Often | 2187 (78.01) | 575 (38.57) | 0.386 | 3065 (26.64) | | 99 (2.97) | <0.001 | 3147 (26.21) | 420 (17.32) | 0.221 |
| Sometimes/Rarely | 301 (20.76) | 98 (43.41) |  | 1325 (25.29) | | 76 (5.60) |  | 1357 (25.19) | 232 19.06) |  |
| Never | 76 (1.23) | 25 (32.90) |  | 2373 (48.07) | | 213 (8.11) |  | 2470 (48.60) | 585 (21.54) |  |
| ***Oil used most often*** |  |  |  |  | |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 10570 (60.85) | 3187 (28.79) | 0.049 | 10067 (60.49) | | 664 (6.74) | 0.098 | 9862 (60.87) | 2659 (30.69) | 0.463 |
| Soybean/Vegetable/ Palm | 5156 (33.32) | 1430 (24.87) |  | 5067 (33.58) | | 259 (3.69) |  | 4085 (33.20) | 1377 (31.40) |  |
| Others/ Olive/Corn /Not specific | 1000 (5.83) | 317 (27.87) |  | 986 (5.93) | | 77 (6.25) |  | 768 (5.93) | 319 (35.27) |  |
| ***Meals eaten outside in a week*** |  |  |  |  | |  |  |  |  |  |
| Yes | 3358 (19.72) | 824 (20.88) | 0.004 | 3225 (19.55) | | 211 (5.18) | 0.598 | 2698 (19.82) | 840 (31.42) | 0.957 |
| No | 12749 (80.28) | 3934 (28.65) |  | 12306 (80.45) | | 762 (5.86) |  | 11542 (80.18) | 3493 (31.30) |  |
| **Physical activity** |  |  |  |  | |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  | |  |  |  |  |  |
| Yes | 3589 (23.22) | 870 (20.42) | 0.006 | 3385 (23.00) | | 100 (2.53) | <0.001 | 3341 (23.00) | 602 (20.70) | <0.001 |
| No | 13314 (76.78) | 4107 (29.49) |  | 12903 (77.00) | | 911 (6.64) |  | 11521 (77.00) | 3813 (34.35) |  |
| ***Moderate activity at work*** |  |  |  |  | |  |  |  |  |  |
| Yes | 9751 (61.80) | 2810 (27.26) | 0.860 | 9337 (61.82) | | 479 (4.91) | 0.003 | 9166 (61.53) | 2591 (30.90) | 0.702 |
| No | 7152 (38.20) | 2167 (27.60) |  | 6951 (38.18) | | 531 (6.95) |  | 5696 (38.47) | 1824 (31.71) |  |
| ***Active transport*** |  |  |  |  | |  |  |  |  |  |
| Yes | 10740 (69.26) | 3057 (25.68) | <0.001 | 10367 (69.22) | | 617 (4.73) | <0.001 | 9588 (69.00) | 3035 (31.42) | 0.501 |
| No | 6168 (30.74) | 1922 (31.24) |  | 5926 (30.78) | | 394 (7.86) |  | 5274 (31.00) | 1380 (30.74) |  |
| ***Vigorous leisure activity*** |  |  |  |  | |  |  |  |  |  |
| Yes | 744 (3.70) | 144 (22.09) | 0.246 | 719 (3.58) | | 30 (1.37) | <0.001 | 446 (3.55) | 78 (17.75) | <0.001 |
| No | 16158 (96.30) | 4832 (27.59) |  | 15568 (96.42) | | 981 (5.85) |  | 14416 (96.45) | 4337 (31.70) |  |
| ***Moderate leisure activity*** |  |  |  |  | |  |  |  |  |  |
| Yes | 1705 (11.27) | 470 (29.37) | 0.556 | 1648 (11.28) | | 115 (7.23) | 0.093 | 1289 (11.37) | 412 (34.40) | 0.313 |
| No | 15197 (88.73) | 4508 (27.14) |  | 14639 (88.72) | | 896 (5.49) |  | 13573 (88.63) | 4003 (30.80) |  |
| ***Obesity*** |  |  |  |  | |  |  |  |  |  |
| Yes | 1162 (5.84) | 620 (56.39) | <0.001 | 1144 (5.90) | | 147 (11.65) | <0.001 | 897 (5.89) | 367 (40.45) | <0.001 |
| No | 15409 (94.16) | 4315 (25.96) |  | 14927 (94.10) | | 853 (5.33) |  | 13749 (94.11) | 3949 (30.38) |  |

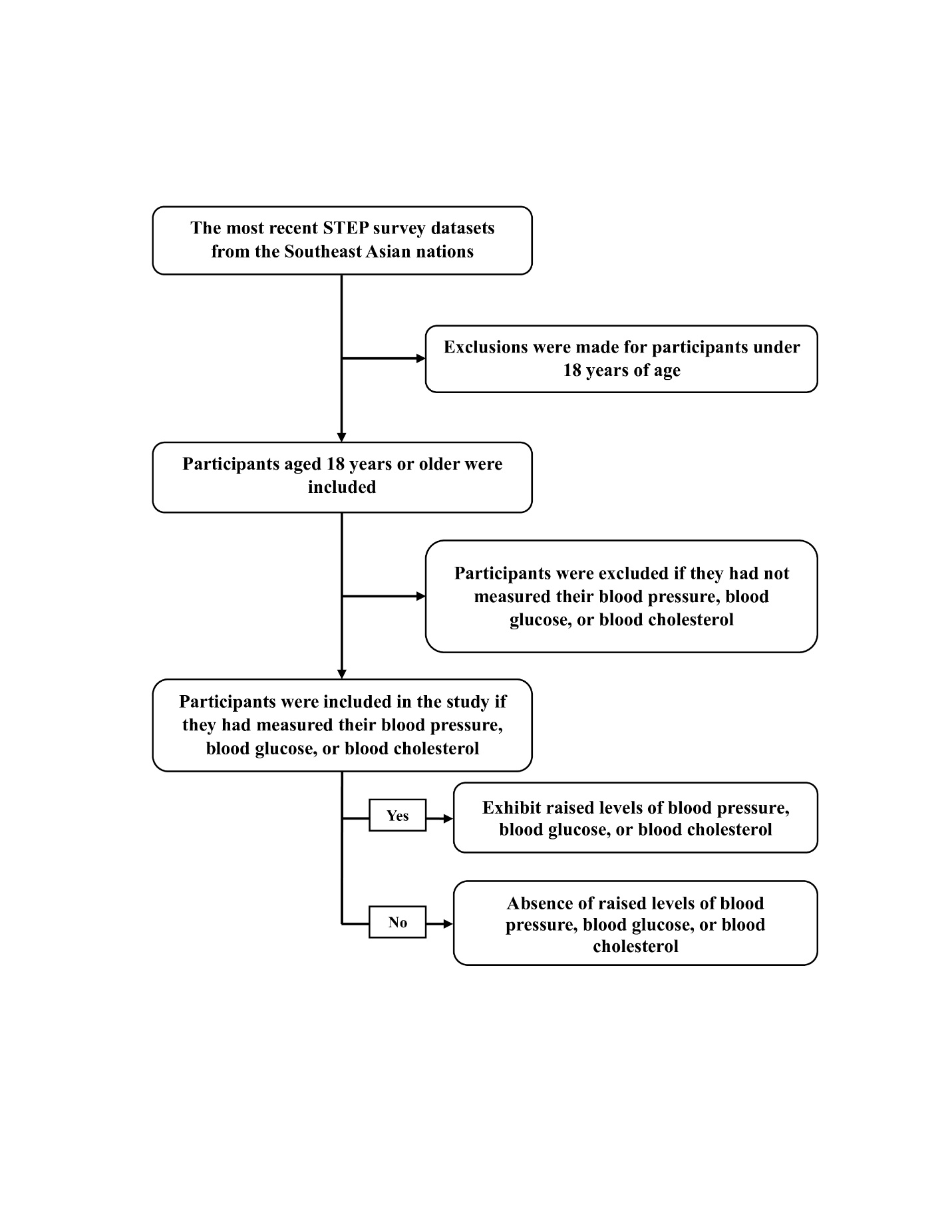
**Table 11: Association of socio-demographic factors with three major NCDs among Southeast Asian adults**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Hypertension (Model 1)** | | **Hyperglycemia ((Model 2)** | | **Hypercholesterolemia ((Model 3)** | |
|  | AOR (95 % CI) | **P-value** | AOR (95 % CI) | **P-value** | AOR (95 % CI) | **P-value** |
| **Socio-economic background** |  |  |  |  |  |  |
| ***Age (18 years or above)*** |  |  |  |  |  |  |
| 18-29 | 0.18 (0.13-0.26) | <0.001 | 0.24 (0.03-1.73) | 0.156 | 0.25 (0.19-0.32) | <0.001 |
| 30-44 | 0.43 (0.34-0.54) | <0.001 | 0.55 (0.16-1.94) | 0.355 | 0.53 (0.46-0.62) | <0.001 |
| 45-59 | 0.81 (0.70-0.96) | 0.018 | 1.22 (0.38-3.87) | 0.736 | 0.95 (0.83-1.09) | 0.488 |
| 60 or above | Reference |  | Reference |  | Reference |  |
| ***Sex*** |  |  |  |  |  |  |
| Female |  |  | 1.13 (0.45-2.83) | 0.795 | 1.37 (1.16-1.60) | <0.001 |
| Male |  |  | Reference |  | Reference |  |
| ***Highest level of education*** |  |  |  |  |  |  |
| No formal schooling to basic literacy | 1.60 (0.83-3.09) | 0.157 | 0.41 (0.03-4.93) | 0.480 | 0.73 (0.53-1.01) | 0.065 |
| Less than primary to Primary school completed | 1.34 (0.74-2.42) | 0.329 | 0.82 (0.09-7.12) | 0.853 | 1.24 (1.01-1.53) | 0.044 |
| Secondary school completed to High school completed | 1.37 (0.61-3.09) | 0.448 | 0.84 (0.07-10.19) | 0.889 | 1.42 (1.11-1.82) | 0.006 |
| College or higher | Reference |  | Reference |  | Reference |  |
| ***Marital status*** |  |  |  |  |  |  |
| Currently Married | 1.14 (1.01-1.30) | 0.039 | 1.20 (0.35-4.16) | 0.771 |  |  |
| Not Married | Reference |  | Reference |  |  |  |
| ***Work status*** |  |  |  |  |  |  |
| Employee/Business/Agriculture/Labour | 0.99 (0.81-1.21) | 0.921 |  |  |  |  |
| Homemaker/Other voluntary work | 1.08 (0.90-1.29) | 0.414 |  |  |  |  |
| Unemployed | Reference |  |  |  |  |  |
| **Food intake** |  |  |  |  |  |  |
| ***Adding salt when eating*** |  |  |  |  |  |  |
| Always/Often |  |  | 1.42 (0.18-11.12) | 0.734 |  |  |
| Sometimes/Rarely |  |  | 0.31 (0.02-4.87) | 0.402 |  |  |
| Never |  |  | Reference |  |  |  |
| ***Oil used most often*** |  |  |  |  |  |  |
| Coconut/groundnut/ Sunflower/Mustard | 1.01 (0.77-1.31) | 0.974 |  |  |  |  |
| Soybean/Vegetable/ Palm | 0.82 (0.58-1.15) | 0.246 |  |  |  |  |
| Others/ Olive/Corn /Not specific | Reference |  |  |  |  |  |
| ***Meals eaten outside in a week*** |  |  |  |  |  |  |
| Yes | 1.40 (0.99-1.97) | 0.051 |  |  |  |  |
| No | Reference |  |  |  |  |  |
| **Physical activity** |  |  |  |  |  |  |
| ***Vigorous activity at work*** |  |  |  |  |  |  |
| **No** | 1.59 (0.99-2.55) | 0.058 | 1.24 (0.46-3.34) | 0.664 | 1.60 (1.26-2.04) | <0.001 |
| **Yes** | Reference |  | Reference |  | Reference |  |
| ***Moderate activity at work*** |  |  |  |  |  |  |
| Yes |  |  | 4.96 (1.53-6.11) | 0.008 |  |  |
| No |  |  | Reference |  |  |  |
| ***Active transport*** |  |  |  |  |  |  |
| **No** | 1.18 (1.04-1.35) | 0.011 | 1.67 (0.73-3.82) | 0.219 |  |  |
| **Yes** | Reference |  | Reference |  |  |  |
| ***Vigorous leisure activity*** |  |  |  |  |  |  |
| Yes |  |  | 1.79 (0.37-8.71) | 0.466 | 1.16 (0.79-1.70) | 0.458 |
| No |  |  | Reference |  | Reference |  |
| ***Obesity*** |  |  |  |  |  |  |
| Yes | 3.01 (2.06-4.40) | <0.001 | 3.89 (1.16-8.10) | 0.028 | 1.17 (0.96-1.43) | 0.114 |
| No | Reference |  | Reference |  | Reference |  |

**Table 12 Goodness of fit of multivariable logistic regression model for three major NCDs among Southeast Asian adults**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Model 1** | **Model 2** | **Model 3** |
| **AIC** | 12439.37 | 542.3975 | 16790.14 |
| **BIC** | 12512.36 | 605.5735 | 16843.24 |
| **AUROC (95% CI)** | 68.01% (66.94%-69.07%) | 71.54% (65.07%-78.01%) | 65.45% (64.49%-66.40%) |
| **P-value of AUROC** | <0.001 | <0.001 | <0.001 |

**Figures**



**Figure 1: Outcome extracting criteria**

|  |  |
| --- | --- |
|  |  |
| (a) | (b) |
|  |  |
| (c) | (d) |
| **Figure 2a. Prevalence of hypertension among Southeast Asian adult people. 2b. Prevalence of hyperglycemia/diabetes among Southeast Asian adult people. 2c: Prevalence of hypercholesterolemia among Southeast Asian adult people 2d. Prevalance of three major NCDs among Southeast Asian adults** | |

|  |  |
| --- | --- |
|  |  |
| **Model 1** | **Model 2** |
|  | |
| **Model 3** | |

**Figure 3. Area Under ROC curve of the adjusted model**

|  |
| --- |
|  |