**7. Supplementary Materials:**

**Table S1.** Sensitivity analysis of the DHS1 2018 and 2019 data

| **Variables** | **PI2(62,417)** | **PF3(17,067)** | ***p-*value** |
| --- | --- | --- | --- |
| ***n* (%)** | ***n* (%)** |
| **Age (years)** |  |  |  |
| 18–29 | 29,695 (39.04) | 5,874 (25.10) | 0.099 |
| 30–39 | 22,102 (32.58) | 7,266 (42.66) |
| 40–49 | 13,620 (28.39) | 3,927 (32.24) |
| **Educational attainment** |  |  |  |
| No education |  1,285 (1.74) |  27 (2.34) | 0.638 |
| Primary | 12,441 (16.81) |  3,883 (21.55) |
| Secondary | 26,305 (39.07) | 7,570 (42.06) |
| Higher | 22,386 (42.39) | 5,229 (34.04) |
| **Marital status**  |  |  |  |
| Single | 10,537 (26.14) | 188 (2.25) | <0.001 |
| Married | 13,958 (22.00) | 4,333 (27.51) |
| Cohabitant | 30,550 (38.92) | 9,778 (50.86) |
| Widow |  474 (0.84) |  185 (1.25) |
| Separate4 |  6,898 (12.11) | 2,583 (18.13) |
| **Natural region**  |  |  |  |
| Metropolitan Lima |  8,536 (37.36) | 1,807 (30.28) | 0.689 |
| Rest of coast | 19,179 (25.48) | 4,864 (24.93) |
| Andean | 20,344 (24.35) | 6,126 (28.94) |
| Amazon | 14, 358 (12.80) | 4,270 (15.86) |
| **Area of residence** |  |  |  |
| Urban  | 44,838 (81.91) | 11,197 (77.02) | 0.394 |
| Rural | 17,579 (18.09) |  5,544 (22.98) |
| **Level of wealth5** |  |  |  |
| Poor | 31,869 (37.63) | 9,940 (46.86) | 0.338 |
| Middle | 12,935 (21.60) | 3,309 (21.54) |
| Richer | 17,613 (40.77) | 3,818 (31.61) |
| **Health insurance6**  |  |  |  |
| Yes | 49,083 (72.56) | 10,366 (76.92) | 0.503 |
| **No** | 13,334 (27.44) |  3,181 (23.08) |
| **Smoke7** |  |  |  |
| Yes |  120 (0.23) |  75 (0.56) | 0.138 |
| **No** | 62,297 (99.77) | 16,992 (99.44) |
| **Alcohol8** |  |  |  |
| Yes |  1,432 (3.80) |  835 (7.29) | 0.281 |
| **No** | 60,985 (96.20) | 16,232 (92.71) |
| **Diabetes mellitus9** |  |  |  |
| Yes |  232 (1.13) |  157 (1.23) | 0.948 |
| **No** | 26,557 (98.87) | 16,910 (98.77) |
| **Arterial hypertension10**  |  |  |  |
| Yes | 1,863 (8.44) | 1,341 (9,88) | 0.724 |
| **No** | 24,582 (91.56) | 15,726 (90.12) |  |
| **Violence11** |  |  |  |
| Physical |  |  |  |
| Yes |  4,575 (9.81) |  1,931 (10.17) | 0.932 |
| No | 30,170 (90.19) | 15,136 (89.83) |
| Sexual |  |  |  |
| Yes | 1,123 (2.57) |  492 (2.94) | 0.873 |
| No | 42,622 (97.43) | 16,575 (97.06) |
| Psychological |  |  |  |
| Yes | 22,179 (52.34) | 8,959 (53.99) | 0.815 |
| No | 21,566 (47.66) | 8,111 (46.01) |

1The results were weighted considering the characteristics of the probability and two-stage sampling defined by the Peruvian Demographic Health Survey (DHS); 2Initial population of women aged 15 to 49 years; 3Final population of women aged 18 to 49 years to whom the exclusion criteria were applied; 4Composed of the grouping of separated and divorced women; 5The rich wealth level is made up of women belonging to the very rich and rich groups and the poor wealth level is made up of the poor and very poor groups, based on the categorization made by the DHS; 6If she belongs to at least one of the existing health insurances at the national level (SIS, EsSalud, military, private); 7A woman is considered to be a smoker if she smoked cigarettes daily in the last 30 days; 8A woman is considered to be consuming alcoholic beverages if she consumed alcohol for ≥12 days in the last year; 9Occurs when a woman has been diagnosed by a physician and purchases medication to control the condition; 10Suffer from arterial hypertension if the average of two blood pressure readings shows a systolic blood pressure ≥140 mmHg and a diastolic blood pressure ≥90 mmHg, or has been diagnosed by a physician; 11A woman is considered to be a sufferer of violence if she is the victim of acts of physical, sexual or emotional abuse by her current or former partner.

**Table S2.** Variables associated with abdominal obesity in women aged 18–49 years participating in the DHS1 2018 and 2019 (n = 17 067).

|  |  |  |
| --- | --- | --- |
| **Variables** | **Abdominal obesity** | ***p-*value** |
| **No abdominal obesity** | **Abdominal obesity** |
| ***n* (%)** | ***n* (%)** |
| **Age (years)**18–2930–3940–49 |  |  |  |
| 2,892 (51.06) | 2,982 (48,94) | <0.001 |
| 2,336 (35.10) | 4,930 (64.90) |
| 1,010 (23.74) | 2,917 (76.26) |
| **Educational attainment** |  |  |  |
| No education |  153 (34,89) |  232 (65.11) | < 0.001 |
| Primary | 1,377 (31,81) | 2,506 (68.19) |
| Secondary | 2,737 (33.35) | 4,833 (66.65) |
| Higher | 1,971 (40.37) | 3,258 (59.63) |
| **Marital status**  |  |  |  |
| Single | 87 (44.37) | 101 (55.63) | 0.013 |
| Married | 1,436 (32.36) | 2,897 (67.64) |
| Cohabitant | 3,619 (35.47) | 6,159 (64,53) |
| Widow |  67 (35.17) |  118 (64.83) |
| Separate2 | 1,029 (38.96) | 1,554 (61.04) |
| **Natural region**  |  |  |  |
| Metropolitan Lima |  615 (33.91) | 1,192 (66.09) |  |
| Rest of coast | 1,419 (29.38) | 3,445 (70.62) | <0.001 |
| Andean | 2,511 (39.80) | 3,615 (69.20) |
| Amazon | 1,693 (39.97) | 2,577 (60.03) |
| **Area of residence** |  |  |  |
| Urban  | 3,872 (33.52) | 7,651 (66.48) | <0.001 |
| Rural | 2,366 (41.91) | 3,178 (58.09) |
| **Level of wealth3** |  |  |  |
| Poor | 3,884 (37.13 | 6,056 (62.87) | 0.014 |
| Middle | 1,029 (31.48) | 2,280 (68.52) |
| Richer | 1,325 (35.66) | 2,493 (64.34) |
| **Health insurance4** |  |  |  |
| Yes | 5,100 (35.46) | 8,786 (64.54) | 0.975 |
| No | 1,138 (35.40) | 2,043 (64.60) |
| **Smoke5** |  |  |  |
| Yes |  22 (33.41) |  53 (66.59) | 0.848 |
| No | 6,216 (35.46) | 10,776 (64.54) |
| **Alcohol6**  |  |  |  |
| Yes |  292 (38.06) |  543 (61.94) | 0.392 |
| No | 5,946 (35.24) | 10,286 (64.76) |
| **Diabetes mellitus7** |  |  |  |
| Yes |  28 (12.94) |  129 (87.06) | <0.001 |
| No | 6,210 (35.73) | 10,700 (64.27) |
| **Arterial hypertension8** |  |  |  |
| Yes |  282 (18.95) | 1,059 (81.05) | <0.001 |
| No | 5,956 (37.25) | 9,770 (62.75) |
| **Violence9** |  |  |  |
| Physical |  |  |  |
| Yes |  767 (38.07) | 1,164 (61.93) | 0.150 |
| No | 5,471 (35.15) | 9,665 (64.85) |
| Sexual |  |  |  |
| Yes |  197 (43.28) |  295 (56.72) | 0.042 |
| No | 6,041 (35.21) | 10,534 (64.79) |
| Psychological |  |  |  |
| Yes | 3,343 (34.86) | 5,613 (65.14) | 0.314 |
| No | 2,895 (36.13) | 5,216 (63.87) |
| **Depressive Symptoms10** |  |  |  |
| Yes |  385 (30.21) |  720 (69.79) | 0.027 |
| No | 5,853 (35.88) | 10,109 (64.12) |

1The results were weighted considering the characteristics of the probability and two-stage sampling defined by the Peruvian Demographic Health Survey (DHS); 2 Composed of separated and divorced women; 3The rich wealth level is made up of women belonging to the very rich and rich groups and the poor wealth level is made up of the poor and very poor groups, based on the categorization made by the DHS; 4 The woman has health insurance if she belongs to at least one of the existing health insurances at the national level (SIS, EsSalud, military, private); 5If she smoked cigarettes daily in the last 30 days; 6If she consumed alcohol for ≥12 days in the last year; 7Occurs when a woman has been diagnosed by a physician and purchases medication to control the condition; 8If suffer from arterial hypertension if the average of two blood pressure readings shows a systolic blood pressure ≥140 mmHg and a diastolic blood pressure ≥90 mmHg, or has been diagnosed by a physician; 9 Intimate Partner Violence (IPV) was defined as acts of physical, sexual, or emotional abuse by a current or former intimate male partner; 10Assessed based on the PHQ-9 and a cut-off point of 10.