

**ONLINE SUPPLEMENTARY DOCUMENT**

**Title: Prevalence and risk factors for chronic kidney disease in Indonesia: An analysis of the National Basic Health Survey 2018**

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**Table S1. Bivariate analysis of proportion difference for CKD across variables**

| Variables                                    | CKD   |     |         |      | Total   |     | OR (95% CI)        | P-value |
|--|-------|-----|---------|------|---------|-----|--------------------|---------|
|  | Yes   |     | No      |      | n       | %   |                    |         |
|  | n     | %   | n       | %    |         |     |                    |         |
| <b>Age group</b>                             |       |     |         |      |         |     |                    |         |
| ≥60 years old                                | 597   | 0.9 | 65,328  | 99.1 | 65,925  | 100 | 1.97 (1.79 – 2.17) | <0.001  |
| 18-59 years old                              | 1,488 | 0.5 | 321,680 | 99.5 | 323,168 | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Gender</b>                                |       |     |         |      |         |     |                    |         |
| Male   | 1,021 | 0.7 | 153,542 | 99.3 | 154,563 | 100 | 1.45 (1.33 – 1.59) | <0.001  |
| Female                                       | 1,064 | 0.5 | 233,466 | 99.5 | 234,530 | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Education</b>                             |       |     |         |      |         |     |                    |         |
| Low  | 1,125 | 0.7 | 170,987 | 99.3 | 172,112 | 100 | 1.48 (1.35 – 1.61) | <0.001  |
| Mid - high                                   | 960   | 0.4 | 216,021 | 99.6 | 216,981 | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Occupation</b>                            |       |     |         |      |         |     |                    |         |
| Employed                                     | 911   | 0.6 | 160,891 | 99.4 | 161,802 | 100 | 1.09 (1.00 – 1.18) | 0.053   |
| Unemployed                                   | 1,174 | 0.5 | 226,117 | 99.5 | 227,291 | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Consumption of fruit &amp; vegetables</b> |       |     |         |      |         |     |                    |         |
| Less   | 2,022 | 0.5 | 375,465 | 99.5 | 377,487 | 100 | 0.98 (0.76 – 1.26) | 0.968   |
| Adequate‡                                    | 63    | 0.5 | 11,543  | 99.5 | 11,606  | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Consumption of salty food</b>             |       |     |         |      |         |     |                    |         |
| Frequent                                     | 762   | 0.5 | 151,389 | 99.5 | 152,151 | 100 | 0.89 (0.82 – 0.98) | 0.017   |
| Seldom                                       | 1,323 | 0.6 | 235,619 | 99.4 | 236,942 | 100 |                    |         |
| Total  | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |         |
| <b>Physical activity</b>                     |       |     |         |      |         |     |                    |         |

|                                     |       |     |         |      |         |     |                    |        |
|-------------------------------------|-------|-----|---------|------|---------|-----|--------------------|--------|
| Less active                         | 1,208 | 0.6 | 192,830 | 99.4 | 194,038 | 100 | 1.38 (1.27 – 1.51) | <0.001 |
| Active†                             | 877   | 0.4 | 194,178 | 99.6 | 195,055 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Smoking</b>                      |       |     |         |      |         |     |                    |        |
| Yes                                 | 751   | 0.6 | 121,724 | 99.4 | 122,475 | 100 | 1.22 (1.12 – 1.34) | <0.001 |
| No                                  | 1,334 | 0.5 | 265,284 | 99.5 | 266,618 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Alcohol consumption</b>          |       |     |         |      |         |     |                    |        |
| Yes                                 | 71    | 0.5 | 14,625  | 99.5 | 14,696  | 100 | 0.89 (0.70 – 1.13) | 0.404  |
| No                                  | 2,014 | 0.5 | 372,383 | 99.5 | 374,397 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Carbonated drink consumption</b> |       |     |         |      |         |     |                    |        |
| Frequent                            | 89    | 0.6 | 14,812  | 99.4 | 14,901  | 100 | 1.12 (0.90 – 1.38) | 0.322  |
| Seldom                              | 1,996 | 0.5 | 372,196 | 99.5 | 374,192 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Heart disease</b>                |       |     |         |      |         |     |                    |        |
| Yes                                 | 258   | 2.6 | 9,847   | 97.4 | 10,105  | 100 | 5.40 (4.74– 6.17)  | <0.001 |
| No                                  | 1,827 | 0.5 | 377,161 | 99.5 | 378,988 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Diabetes Mellitus</b>            |       |     |         |      |         |     |                    |        |
| Yes                                 | 263   | 2   | 12,753  | 98   | 13,016  | 100 | 4.23 (3.71 – 4.82) | <0.001 |
| No                                  | 1,822 | 0.5 | 374,255 | 99.5 | 376,077 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Stroke</b>                       |       |     |         |      |         |     |                    |        |
| Yes                                 | 137   | 2   | 6,615   | 98   | 6,752   | 100 | 4.04 (3.39 – 4.81) | <0.001 |
| No                                  | 1,948 | 0.5 | 380,393 | 99.5 | 382,341 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Hypertensive</b>                 |       |     |         |      |         |     |                    |        |
| Yes                                 | 1,192 | 0.8 | 157,613 | 99.2 | 158,805 | 100 | 1.94 (1.78 – 2.11) | <0.001 |
| No                                  | 893   | 0.4 | 229,395 | 99.6 | 230,288 | 100 |                    |        |
| Total                               | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                    |        |
| <b>Hepatitis</b>                    |       |     |         |      |         |     |                    |        |
| Yes                                 | 43    | 2.2 | 1,879   | 97.8 | 1,922   | 100 | 4.31 (3.18 – 5.85) | <0.001 |
| No                                  | 2,042 | 0.5 | 385,129 | 99.5 | 387,171 | 100 |                    |        |

|                                      |       |     |         |      |         |     |                     |        |
|--------------------------------------|-------|-----|---------|------|---------|-----|---------------------|--------|
| Total                                | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                     |        |
| <b>Body mass index</b>               |       |     |         |      |         |     |                     |        |
| Obese*                               | 567   | 0.6 | 98,092  | 99.4 | 98,659  | 100 | 1.10 (0.99 – 1.21)  | 0.056  |
| Non-Obese                            | 1,518 | 0.5 | 288,916 | 99.5 | 290,434 | 100 |                     |        |
| Total                                | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                     |        |
| <b>Complication during pregnancy</b> |       |     |         |      |         |     |                     |        |
| Hypertension                         | 11    | 0.5 | 2,217   | 99.5 | 2,228   | 100 | 0.42 (0.22 – 0.80)  | 0.008  |
| Other than hypertension              | 974   | 0.5 | 193,835 | 99.5 | 194,809 | 100 | 0.39 (0.33 – 0.52)  | <0.001 |
| Without complication                 | 79    | 0.2 | 37,414  | 99.8 | 37,493  | 100 |                     |        |
| Total                                | 1,064 | 0.5 | 233,466 | 99.5 | 234,530 | 100 |                     |        |
| <b>Water supply§</b>                 |       |     |         |      |         |     |                     |        |
| Not clean                            | 770   | 0.5 | 140,900 | 99.5 | 141,670 | 100 | 1.02 (0.93 – 1.11)  | 0.637  |
| Clean                                | 1,315 | 0.5 | 246,108 | 99.5 | 247,423 | 100 |                     |        |
| Total                                | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                     |        |
| <b>Access to hospital</b>            |       |     |         |      |         |     |                     |        |
| None                                 | 37    | 0.5 | 6,757   | 99.5 | 6,794   | 100 | 1.128 (0.941-1.351) | 0.193  |
| Yes, near access                     | 1964  | 0.5 | 363,226 | 99.5 | 365,190 | 100 | 1.071 (0.974-1.178) | 0.158  |
| Yes, distant access                  | 84    | 0.5 | 17,025  | 99.5 | 17,109  | 100 |                     |        |
| Total                                | 2,085 | 0.5 | 387,008 | 99.5 | 389,093 | 100 |                     |        |
| <b>Access to primary health care</b> |       |     |         |      |         |     |                     |        |
| Yes, distant access¶                 | 684   | 0.6 | 121,481 | 99.5 | 121,481 | 100 | 0.857 (0.579-1.268) | 0.440  |
| Yes, near access                     | 1254  | 0.5 | 236,141 | 99.5 | 237,395 | 100 | 0.893 (0.714-1.118) | 0.324  |
| None                                 | 147   | 0.5 | 29,386  | 99.5 | 29,533  | 100 |                     |        |
| Total                                | 1,838 | 0.5 | 354,155 | 99.5 | 355,993 | 100 |                     |        |

\*Obese if BMI >27 kg/m<sup>2</sup>

†Active physical activity: regularly doing moderate or high (both) physical activity. Less active: not regularly.

‡Consumption of fruit & vegetables: adequate if more than 5 portion/day for 7 days in a week.

§Classification of water supply based on JMP WHO – UNICEF 2006.

¶Distant: takes more than 30 minutes to access the healthcare facility.

BMI – body mass index