Supplementary table 1. Prevalence, Kappa statistic and overall agreement for diagnosis of non-dipping status, and degree of dipping using different diurnal definitions

(n = 174).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|   | Overall(%) | NoNo(%) | NoYes(%) | YesNo(%) | YesYes(%) | Kappa Statistic(95% confidence interval) | Overall percent agreement(95% confidence interval) |
| Non-dipping status (2-groups: non-dipping versus dipping) |  |  |  |  |  |  |  |
| Fixed period (wide-defined)Fixed period (narrow-defined) | 77.1\*\*68.7 | 22.3 | 0.6 | 8.9 | 68.2 | 0.76 (0.66 – 0.87) | 0.91 (0.86 – 0.95) |
| Fixed period (wide-defined)Actigraphy  | 77.1\*\*64.8 | 21.8 | 1.1 | 13.4 | 63.7 | 0.65 (0.54 – 0.77) | 0.85 (0.80 – 0.91) |
| Fixed period (wide-defined)Diary | 77.1\*\*68.9 | 22 | 0.6 | 9 | 68.4 | 0.76 (0.65 – 0.86) | 0.90 (0.86 – 0.95) |
| Fixed period (narrow-defined)Actigraphy | 68.764.8 | 27.4 | 3.9 | 7.8 | 60.9 | 0.74 (0.63 – 0.84) | 0.88 (0.83 – 0.93) |
| Fixed period (narrow-defined)Diary | 68.768.9 | 26 | 5.1 | 5.1 | 63.8 | 0.76 (0.66 – 0.87) | 0.90 (0.85 – 0.94) |
| Actigraphy Diary | 64.868.9 | 28.2 | 6.8 | 2.8 | 62.1 | 0.78 (0.69 – 0.88) | 0.90 (0.86 – 0.95) |
| Degree of dipping (4-groups: extreme dipping, normal dipping, non-dipping, reverse dipping) |
| Extreme dipping |  |  |  |  |  |  |  |
| Fixed period (wide-defined)Fixed period (narrow-defined) | 1.11.7 | 98.3 | 0.6 | 0 | 1.1 | 0.8 (0.41 – 1) | 0.99 (0.98 – 1.01) |
| Fixed period (wide-defined)Actigraphy  | 1.11.7 | 98.3 | 0.6 | 0 | 1.1 | 0.8 (0.41 – 1) | 0.99 (0.98 – 1.01) |
| Fixed period (wide-defined)Diary | 1.12.3 | 97.2 | 1.7 | 0.6 | 0.6 | 0.32 (-0.17 – 0.81) | 0.98 (0.96 – 1.00) |
| Fixed period (narrow-defined)Actigraphy | 1.71.7 | 97.8 | 0.6 | 0.6 | 1.1 | 0.66 (0.22 – 1) | 0.99 (0.97 – 1.00) |
| Fixed period (narrow-defined)Diary | 1.72.3 | 97.2 | 1.7 | 0.6 | 0.6 | 0.32 (-0.17 – 0.81) | 0.98 (0.96 – 1.00) |
| Actigraphy Diary | 1.72.3 | 97.2 | 1.1 | 0.6 | 1.1 | 0.56 (0.12 – 1) | 0.98 (0.96 – 1.00) |
| Normal dipping |  |  |  |  |  |  |  |
| Fixed period (wide-defined)Fixed period (narrow-defined) | 21.8\*\*29.6 | 69.3 | 8.9 | 1.1 | 20.7 | 0.74 (0.63 – 0.85) | 0.90 (0.85 – 0.94) |
| Fixed period (wide-defined)Actigraphy  | 21.8\*\*33.5 | 64.8 | 13.4 | 1.7 | 20.1 | 0.63 (0.51 – 0.75) | 0.85 (0.80 – 0.90) |
| Fixed period (wide-defined)Diary | 21.8\*\*28.8 | 68.9 | 9.6 | 2.3 | 19.2 | 0.69 (0.56 – 0.81) | 0.88 (0.83 – 0.93) |
| Fixed period (narrow-defined)Actigraphy | 29.633.5 | 62 | 8.4 | 4.5 | 25.1 | 0.7 (0.59 – 0.82) | 0.87 (0.82 – 0.92) |
| Fixed period (narrow-defined)Diary | 29.628.8 | 64.4 | 5.6 | 6.8 | 23.2 | 0.7 (0.58 – 0.82) | 0.88 (0.83 – 0.92) |
| Actigraphy Diary | 33.528.8 | 63.3 | 3.4 | 7.9 | 25.4 | 0.74 (0.63 – 0.84) | 0.89 (0.84 – 0.93) |
| Non-dipping |  |  |  |  |  |  |  |
| Fixed period (wide-defined)Fixed period (narrow-defined) | 62.0\*\*51.4 | 36.3 | 1.7 | 12.3 | 49.7 | 0.72 (0.62 – 0.82) | 0.86 (0.81 – 0.91) |
| Fixed period (wide-defined)Actigraphy  | 62.055.3 | 29.6 | 8.4 | 15.1 | 46.9 | 0.52 (0.39 – 0.64) | 0.77 (0.70 – 0.83) |
| Fixed period (wide-defined)Diary | 62.058.2 | 32.2 | 5.6 | 9.6 | 52.5 | 0.68 (0.57 – 0.79) | 0.85 (0.79 – 0.90) |
| Fixed period (narrow-defined)Actigraphy | 51.455.3 | 35.2 | 13.4 | 9.5 | 41.9 | 0.54 (0.42 – 0.66) | 0.77 (0.71 – 0.83) |
| Fixed period (narrow-defined)Diary | 51.4\*58.2 | 36.7 | 11.9 | 5.1 | 46.3 | 0.66 (0.55 – 0.77) | 0.83 (0.77 – 0.89) |
| Actigraphy Diary | 55.358.2 | 34.5 | 10.2 | 7.3 | 48 | 0.64 (0.53 – 0.76) | 0.82 (0.77 – 0.88) |
| Reverse dipping |  |  |  |  |  |  |  |
| Fixed period (wide-defined)Fixed period (narrow-defined) | 15.117.3 | 81.6 | 3.4 | 1.1 | 14 | 0.84 (0.73 – 0.95) | 0.96 (0.92 – 0.99) |
| Fixed period (wide-defined)Actigraphy  | 15.1\*9.5 | 83.2 | 1.7 | 7.3 | 7.8 | 0.59 (0.41 – 0.77) | 0.91 (0.87 – 0.95) |
| Fixed period (wide-defined)Diary | 15.1\*10.7 | 84.2 | 0.6 | 5.1 | 10.2 | 0.75 (0.61 – 0.9) | 0.94 (0.91 – 0.98) |
| Fixed period (narrow-defined)Actigraphy | 17.3\*\*9.5 | 81 | 1.7 | 9.5 | 7.8 | 0.53 (0.35 – 0.7) | 0.89 (0.84 – 0.94) |
| Fixed period (narrow-defined)Diary | 17.3\*\*10.7 | 82.5 | 0 | 6.8 | 10.7 | 0.72 (0.58 – 0.87) | 0.93 (0.89 – 0.97) |
| Actigraphy Diary | 9.510.7 | 85.9 | 4.5 | 3.4 | 6.2 | 0.57 (0.36 – 0.77) | 0.92 (0.88 – 0.96) |

\*Indicates p-value ≤0.05 using McNemar’s chi-square test on paired proportions.

\*\*Indicates p-value ≤0.01 using McNemar’s chi-square test on paired proportions.