**Supplementary Table 11**. OR and 95%CI for the association between trajectories of vitamin D status and the number of binary depression symptoms across three waves (n=1512)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | None | One type of depression symptoms | Two types of depression symptoms | Three types of depression symptoms |
| **Overall sample adjusted for sex** |  |  |  |  |
| Unadjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 0.95(0.70, 1.29) | 1.03(0.73, 1.45) | 0.97(0.69, 1.37) |
| Remitted VDD | Reference | **2.05(1.13, 3.72)** | 1.18(0.56, 2.48) | 1.19(0.56, 2.50) |
| Persistent VDD | Reference | 1.23(0.88, 1.72) | 1.56(1.09, 2.24) | 1.20(0.82, 1.75) |
| Adjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 1.12(0.78, 1.59) | 0.96(0.67, 1.37) | 0.85(0.59, 1.22) |
| Remitted VDD | Reference | **2.15(1.15, 4.01)** | 1.22(0.56, 2.64) | 1.16(0.53, 2.54) |
| Persistent VDD | Reference | 0.92(0.67, 1.26) | 1.36(0.93, 1.99) | 0.92(0.61, 1.38) |
| **Males** |  |  |  |  |
| Unadjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 0.97(0.66, 1.42) | 1.10(0.71, 1.71) | 0.80(0.50, 1.28) |
| Remitted VDD | Reference | **1.97(1.21, 4.24)** | 2.00(0.84, 4.76) | 1.36(0.52, 3.54) |
| Persistent VDD | Reference | 1.21(0.78, 1.87) | **1.65(1.03, 2.66)** | 1.03(0.61, 1.74) |
| Adjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 0.98(0.66, 1.46) | 1.13(0.72, 1.77) | 0.82(0.50, 1.33) |
| Remitted VDD | Reference | **2.29(1.01, 5.20)** | 2.47(0.98, 6.20) | 1.81(0.65, 5.03) |
| Persistent VDD | Reference | 1.12(0.71, 1.47) | **1.58(1.02, 2.60)** | 1.04(0.60, 1.81) |
| **Females** |  |  |  |  |
| Unadjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 0.74(0.42, 1.29) | 0.67(0.37, 1.18) | 0.82(0.46, 1.46) |
| Remitted VDD | Reference | 1.75(0.66, 4.62) | 0.27(0.05, 1.35) | 0.73(0.22, 2.44) |
| Persistent VDD | Reference | 0.98(0.55, 1.76) | 0.99(0.55, 1.80) | 0.94(0.51, 1.73) |
| Adjusted |  |  |  |  |
| No VDD | Reference | Reference | Reference | Reference |
| New VDD | Reference | 0.77(0.43, 1.36) | 0.68(0.38, 1.23) | 0.83(0.46, 1.51) |
| Remitted VDD | Reference | 1.80(0.65, 4.96) | 0.21(0.04, 1.08) | 0.62(0.18, 2.17) |
| Persistent VDD | Reference | 1.09(0.59, 1.99) | 0.99(0.54, 1.82) | 0.87(0.46, 1.65) |

Adjusted model included covariates: age at wave 1, only child status, family structure, self-perceived family economic status, BMI at wave 1, physical activity at wave 1 and self-perceived puberty timing at wave 1.