**Table 3. Mediation analyses: physical performance, physical activity, analgesics use and opioids use as potential mediators (M) in the association between clinical OA of the hip and knee (Determinant, D) and falls (Outcome, O)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clinical OA (D) | Mediating variable (M) | Outcome  (O) | Effect of D on M  (a-path) | Effect of M on O  (b-path) | Direct effect (c’-path) | p-value  (c’-path) | Indirect effect (a x b) | 95% CI (ab) |
| Hip OA | Physical performance | Falls | -1.440\* | -0.024 | 0.255 | 0.100 | 0.035 | (-0.013; 0.086) |
|  | LN (Physical activity) | Falls | -0.054 | -0.014 | 0.288 | 0.061 | 0.001 | (-0.009; 0.012) |
|  | Analgesics use | Falls | 0.184 | 0.272\* | 0.280 | 0.068 | 0.050 | (-0.049; 0.183) |
|  | Opioids use | Falls | 1.111\* | 0.285 | 0.256 | 0.095 | 0.317 | (-0.062; 0.760) |
| Hip OA | Physical performance | Recurrent falls | -1.440\* | -0.053 | 0.306 | 0.219 | 0.076 | (-0.004; 0.166) |
|  | LN (Physical activity) | Recurrent falls | -0.054 | -0.044 | 0.379 | 0.124 | 0.002 | (-0.013; 0.023) |
|  | Analgesics use | Recurrent falls | 0.184 | 0.417\* | 0.364 | 0.139 | 0.077 | (-0.075; 0.283) |
|  | Opioids use | Recurrent falls | 1.111\* | 0.585\* | 0.309 | 0.211 | 0.650 | (0.088; 1.353)\* |
| Knee OA | Physical performance | Falls | -1.035\* | -0.026 | 0.072 | 0.498 | 0.027 | (-0.007; 0.064) |
|  | LN (Physical activity) | Falls | -0.096\* | -0.013 | 0.097 | 0.358 | 0.001 | (-0.011; 0.014) |
|  | Analgesics use | Falls | 0.378\* | 0.269\* | 0.076 | 0.470 | 0.102 | (0.016; 0.217)\* |
|  | Opioids use | Falls | 0.913\* | 0.308 | 0.077 | 0.472 | 0.281 | (-0.033; 0.657) |
| Knee OA | Physical performance | Recurrent falls | -1.035\* | -0.047 | 0.385 | 0.029\* | 0.049 | (-0.009; 0.117) |
|  | LN (Physical activity) | Recurrent falls | -0.096\* | -0.032 | 0.431 | 0.014\* | 0.003 | (-0.016; 0.024) |
|  | Analgesics use | Recurrent falls | 0.378\* | 0.381\* | 0.398 | 0.023\* | 0.144 | (0.015; 0.322)\* |
|  | Opioids use | Recurrent falls | 0.913\* | 0.539\* | 0.391 | 0.026\* | 0.492 | (0.032; 1.073)\* |

Analyses were performed using multivariable regression analyses for continuous outcomes and Cox proportional hazards model with equal survival time for all subjects for dichotomous outcomes. Presented are the Beta’s unless stated otherwise. All analyses were adjusted for age, sex, country, level of education, body mass index, smoking, alcohol use, number of chronic diseases. The b-path was additionally adjusted for clinical OA. The c’-path was additionally adjusted for the potential mediator. \* p<0.05