**Table 2. Clinical outcomes after delirium: Sub-group analyses categorical data results**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Clinical outcome** | **Sub-group**  **(number of studies)** | **Timepoint** | **Model adjustment** | **OR** | **95% CI** | **p-value** | **I²** (%) | **τ²** |
| Cognition | Cognitive impairment (n=9) | Collapsed | Adjusted | 2.471 | 1.609 - 3.794 | <0.001 | 79.9 | 0.321 |
| Cognitive impairment (n=4) | ≤6 months | Adjusted | 1.511 | 1.076 - 2.122 | 0.017 | 17.0 | 0.021 |
| Cognitive impairment (n=2) | 6-12 months | Adjusted | 1.865 | 1.138-3.057 | 0.013 | 64.2 | 0.082 |
| Cognitive impairment (n=3) | >12 months | Adjusted | 4.907 | 1.965-12.254 | 0.001 | 76.4 | 0.469 |
| Cognitive impairment (n=11) | Collapsed | Unadjusted | 1.958 | 1.410-2.720 | <0.001 | 73.2 | 0.168 |
| Cognitive impairment (n=7) | ≤6 months | Unadjusted | 1.771 | 1.276-2.460 | 0.001 | 42.2 | 0.069 |
| Cognitive impairment (n=6) | 6-12 months | Unadjusted | 2.488 | 1.305-4.745 | 0.006 | 81.3 | 0.501 |
| Cognitive impairment (n=3) | >12 months | Unadjusted | 4.606 | 1.644-12.907 | 0.004 | 91.3 | 0.723 |
| Cognitive decline (5) | Collapsed | Unadjusted | 1.656 | 1.062-2.585 | 0.026 | 28.8 | 0.077 |
| Cognitive decline (n=4) | ≤6 months | Unadjusted | 1.527 | 0.907-2.570 | 0.111 | 40.6 | 0.114 |
| Cognitive decline (n=2) | >6 months | Unadjusted | 2.220 | 1.287-3.828 | 0.004 | 0.00 | 0.00 |
| Functional outcome | Functional impairment (n=13) | Collapsed | Adjusted | 2.017 | 1.657-2.456 | <0.001 | 49.7 | 0.046 |
| Functional impairment (n=8) | ≤6 months | Adjusted | 1.757 | 1.470-2.099 | <0.001 | 26.6 | 0.015 |
| Functional impairment (n=5) | 6-12 months | Adjusted | 2.176 | 1.387-3.413 | 0.001 | 54.6 | 0.122 |
| Functional impairment (n=3) | >12 months | Adjusted | 2.893 | 1.692-4.945 | <0.001 | 0.0 | 0.000 |
| Functional decline (n=6) | Collapsed | Adjusted | 2.312 | 1.706-3.133 | <0.001 | 0.0 | 0.000 |
| Functional decline (n=4) | ≤6 months | Adjusted | 2.204 | 1.526-3.183 | <0.001 | 0.0 | 0.000 |
| Functional impairment (n=15) | Collapsed | Unadjusted | 2.186 | 1.397-3.422 | 0.001 | 94.5 | 0.668 |
| Functional impairment (n=8) | ≤6 months | Unadjusted | 1.394 | 0.862-2.255 | 0.175 | 91.4 | 0.400 |
| Functional impairment (n=2) | 6-12 months | Unadjusted | 2.637 | 1.174-5.923 | 0.019 | 94.8 | 0.323 |
| Functional impairment (n=5) | >12 months | Unadjusted | 4.277 | 1.210-15.118 | 0.024 | 91.2 | 1.831 |
| Functional decline (n=17) | Collapsed | Unadjusted | 1.866 | 1.506-2.312 | <0.001 | 47.0 | 0.084 |
| Functional decline (n=12) | ≤6 months | Unadjusted | 1.710 | 1.285-2.275 | <0.001 | 55.9 | 0.125 |
| Functional decline (n=5) | 6-12 months | Unadjusted | 2.651 | 1.974-3.561 | <0.001 | 0.0 | 0.000 |
| Functional decline (n=2) | >12 months | Unadjusted | 1.945 | 0.967-3.912 | 0.062 | 0.0 | 0.000 |
| Quality of life | Poor quality of life (n=4) | Collapsed | Unadjusted | 2.131 | 1.693-2.682 | <0.001 | 0.0 | 0.000 |
| Poor quality of life (n=3) | ≤6 months | Unadjusted | 1.804 | 1.237-2.631 | 0.002 | 0.0 | 0.000 |
| Mental health | Mental health problems (n=8) | Collapsed | Adjusted | 1.775 | 1.283-2.458 | 0.001 | 81.9 | 0.159 |
| Mental health problems (n=5) | ≤6 months | Adjusted | 1.628 | 1.259-2.106 | <0.001 | 0.0 | 0.000 |
| Mental health problems (n=5) | >6 months | Adjusted | 2.004 | 1.224-3.283 | 0.006 | 89.3 | 0.259 |
| Mental health problems (n=6) | Collapsed | Unadjusted | 1.539 | 0.962-2.462 | 0.072 | 78.4 | 0.244 |
| Mental health problems (n=6) | ≤6 months | Unadjusted | 1.483 | 0.899-2.447 | 0.123 | 74.9 | 0.259 |
| Mental health problems (n=2) | >6 months | Unadjusted | 2.575 | 1.507-4.400 | 0.001 | 10.9 | 0.018 |
| Dementia | Dementia (n=14) | Collapsed | Adjusted | 5.595 | 3.551-8.815 | <0.001 | 56.8 | 0.383 |
| Dementia (n=3) | ≤6 months | Adjusted | 5.675 | 2.677-12.028 | <0.001 | 0.0 | 0.000 |
| Dementia (n=4) | 6-12 months | Adjusted | 3.959 | 1.461-10.728 | 0.007 | 71.1 | 0.686 |
| Dementia (n=7) | >12 months | Adjusted | 6.717 | 4.206-10.725 | <0.001 | 0.0 | 0.000 |
| Dementia (n=10) | Collapsed | Unadjusted | 4.903 | 2.066-11.634 | <0.001 | 94.0 | 1.654 |
| Dementia (n=3) | ≤6 months | Unadjusted | 5.373 | 0.810-35.655 | 0.082 | 61.2 | 1.685 |
| Dementia (n=5) | 6-12 months | Unadjusted | 4.090 | 1.428-11.716 | 0.009 | 82.8 | 0.998 |
| Dementia (n=5) | >12 months | Unadjusted | 3.572 | 1.047-12.185 | 0.042 | 94.7 | 1.741 |
| Institutionalization | Institutionalization (n=11) | Collapsed | Adjusted | 2.199 | 1.726-2.802 | <0.001 | 33.9 | 0.048 |
| Institutionalization (n=6) | ≤6 months | Adjusted | 2.332 | 1.473-3.693 | <0.001 | 62.9 | 0.177 |
| Institutionalization (n=6) | >12 months | Adjusted | 2.066 | 1.521-2.808 | <0.001 | 0.0 | 0.000 |
| Institutionalization (n=18) | Collapsed | Unadjusted | 3.132 | 2.139-4.588 | <0.001 | 71.8 | 0.440 |
| Institutionalization (n=9) | ≤6 months | Unadjusted | 2.903 | 1.427-5.906 | 0.003 | 78.0 | 0.845 |
| Institutionalization (n=7) | 6-12 months | Unadjusted | 4.818 | 2.588-8.970 | <0.001 | 74.4 | 0.511 |
| Institutionalization (n=5) | >12 months | Unadjusted | 2.578 | 1.560-4.261 | <0.001 | 50.2 | 0.153 |
| Readmission/revisit | Readmission/revisit (n=8) | Collapsed | Adjusted | 1.881 | 1.258-2.812 | 0.002 | 74.4 | 0.217 |
| Readmission/revisit (n=6) | ≤6 months | Adjusted | 1.992 | 1.220-3.254 | 0.006 | 74.6 | 0.278 |
| Readmission/revisit (n=2) | 6-12 months | Adjusted | 1.593 | 1.107-2.293 | 0.012 | 0.0 | 0.000 |
| Readmission/revisit (n=23) | Collapsed | Unadjusted | 1.626 | 1.309-2.020 | <0.001 | 57.7 | 0.125 |
| Readmission/revisit (n=22) | ≤6 months | Unadjusted | 1.649 | 1.303-2.087 | <0.001 | 57.9 | 0.148 |
| Readmission/revisit (n=3) | >12 months | Unadjusted | 1.562 | 1.195-2.040 | 0.001 | 0.0 | 0.000 |
| Mortality | Mortality (n=32) | Collapsed | Adjusted | 2.230 | 1.826-2.725 | <0.001 | 60.9 | 0.174 |
| Mortality (n=21) | ≤6 months | Adjusted | 2.670 | 2.230-3.196 | <0.001 | 18.1 | 0.031 |
| Mortality (n=9) | 6-12 months | Adjusted | 1.964 | 1.549-2.491 | <0.001 | 0.0 | 0.000 |
| Mortality (n=6) | >12 months | Adjusted | 1.270 | 0.733-1.203 | 0.394 | 73.3 | 0.289 |
| Mortality (n=139) | Collapsed | Unadjusted | 2.606 | 2.374-2.861 | <0.001 | 84.4 | 0.196 |
| Mortality (n=83) | ≤6 months | Unadjusted | 2.999 | 2.620-3.434 | <0.001 | 77.2 | 0.206 |
| Mortality (n=68) | 6-12 months | Unadjusted | 2.419 | 2.133-2.743 | <0.001 | 76.1 | 0.170 |
|  | Mortality (n=38) | >12 months | Unadjusted | 2.116 | 1.747-2.562 | <0.001 | 85.3 | 0.247 |

Cognitive decline: No adjusted data

The time collapsed and specific articles numbers may be different from the total number because of a single article may have included in different follow-up time points.

A single article can be categorised in both adjusted and unadjusted depending on adjustment at specific follow-up time point (e.g., McCusker, the 6-month data not adjusted while a one-year data adjusted). So, the total number of articles in the adjusted and unadjusted analysis, could be different from the main analysis articles number. E.g., Cognitive continuous data a total of 47 article but when we classified based on model adjustment it become 48 because McCusker counted twice (one in adjusted and the other unadjusted).

**Table 3. Clinical outcomes after delirium: Sub-group analyses continuous data results**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Clinical outcome** | **Sub-group**  **(number of studies)** | **Timepoint** | **Model adjustment** | **Hedges's g** | **95% CI** | **p-value** | **I²** (%) | **τ²** |
| Cognition | Cognitive impairment (n=16) | Collapsed | Adjusted | -0.413 | -0.569 to -0.256 | <0.001 | 94.6 | 0.084 |
| Cognitive impairment (n=14) | ≤6 months | Adjusted | -0.398 | -0.587 to -0.208 | <0.001 | 91.8 | 0.104 |
| Cognitive impairment (n=8) | 6-12 months | Adjusted | -0.462 | -0.728 to -0.196 | 0.001 | 91.8 | 0.128 |
| Cognitive impairment (n=5) | >12 months | Adjusted | -0.448 | -0.749 to -0.147 | 0.004 | 96.4 | 0.105 |
| Cognitive decline (n=2) | Collapsed | Adjusted | 0.089 | -0.037 to -0.214 | 0.167 | 0.0 | 0.000 |
| Cognitive decline (n=2) | ≤6 months | Adjusted | 0.101 | -0.029 to -0.231 | 0.128 | 0.0 | 0.000 |
| Cognitive impairment (n=28) | Collapsed | Unadjusted | -0.648 | -0.816 to -0.481 | <0.001 | 92.6 | 0.178 |
| Cognitive impairment (n=19) | ≤6 months | Unadjusted | -0.619 | -0.758 to -0.480 | <0.001 | 79.1 | 0.064 |
| Cognitive impairment (n=9) | 6-12 months | Unadjusted | -0.747 | -1.021 to -0.473 | <0.001 | 79.8 | 0.130 |
| Cognitive impairment (n=6) | >12 months | Unadjusted | -0.957 | -1.702 to -0.212 | 0.012 | 97.2 | 0.830 |
| Functional outcome | Functional impairment (n=11) | Collapsed | Adjusted | -0.588 | -0.891 to -0.285 | <0.001 | 97.5 | 0.241 |
| Functional impairment (n=9) | ≤6 months | Adjusted | -0.641 | -1.100 to -0.182 | 0.006 | 97.8 | 0.477 |
| Functional impairment (n=6) | 6-12 months | Adjusted | -0.247 | -0.441 to -0.052 | 0.013 | 75.2 | 0.039 |
| Functional impairment (n=3) | >12 months | Adjusted | -0.214 | -0.299 to -0.128 | <0.001 | 0.0 | 0.000 |
| Functional impairment (n=29) | Collapsed | Unadjusted | -0.625 | -0.891 to -0.358 | <0.001 | 97.4 | 0.511 |
| Functional impairment (n=25) | ≤6 months | Unadjusted | -0.610 | -0.908 to -0.312 | <0.001 | 97.3 | 0.551 |
| Functional impairment (n=8) | 6-12 months | Unadjusted | -0.739 | -1.154 to -0.323 | <0.001 | 95.1 | 0.333 |
| Functional impairment (n=3) | >12 months | Unadjusted | -0.904 | -1.721 to -0.087 | 0.030 | 93.4 | 0.476 |
| Quality of life | Poor quality of life (n=7) | Collapsed | Adjusted | -0.315 | -0.464 to -0.166 | <0.001 | 85.1 | 0.031 |
| Poor quality of life (n=4) | ≤6 months | Adjusted | -0.422 | -0.823 to -0.021 | 0.039 | 92.2 | 0.150 |
| Poor quality of life (n=4) | >6 months | Adjusted | -0.233 | -0.284 to -0.182 | <0.001 | 0.0 | 0.000 |
| Poor quality of life (n=15) | Collapsed | Unadjusted | -0.509 | -0.681 to -0.338 | <0.001 | 95.0 | 0.097 |
| Poor quality of life (n=10) | ≤6 months | Unadjusted | -0.306 | -0.454 to -0.158 | <0.001 | 88.3 | 0.043 |
| Poor quality of life (n=5) | >6 months | Unadjusted | -0.604 | -0.854 to -0.353 | <0.001 | 88.9 | 0.064 |
| Mental health | Mental health problems (n=2) | Collapsed | Adjusted | -0.281 | -0.747 to 0.184 | 0.236 | 71.0 | 0.082 |
| Mental health problems (n=2) | ≤6 months | Adjusted | -0.310 | -0.681 to -0.061 | 0.101 | 10.0 | 0.009 |
| Mental health problems (n=2) | >12 months | Adjusted | -0.321 | -0.821 to -0.179 | 0.208 | 57.4 | 0.078 |
| Mental health problems (n=9) | Collapsed | Unadjusted | -0.336 | -0.514 to -0.157 | <0.001 | 78.0 | 0.052 |
| Mental health problems (n=8) | ≤6 months | Unadjusted | -0.321 | -0.523 to -0.119 | 0.002 | 76.6 | 0.057 |
| Mental health problems (n=4) | >12 months | Unadjusted | -0.451 | -0.649 to -0.254 | <0.001 | 0.0 | 0.000 |

Footnote: functional decline data for continuous data not presented due to only one study presented the outcome.

Data not presented: when less than 2 paper available

Only one paper on cognitive decline unadjusted data

Only one paper on functional decline continuous data