**Table 3. Distribution of influenza hospitalized cases according to intensive care unit admission. Catalonia, 2017-2018**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Patient parameters** | **Total number of hospitalized laboratory confirmed influenza cases**  **n=1414** | **ICUa**  **admission**  **n=214** | **No ICU admission**  **n=1200** | **ORb (95%CIc)** | **p value** |
| **Influenza vaccination** | |  |  |  |  |
| Yes | 465 (32.9%) | 52 (11.2%) | 413 (88.8%) | 0.61 (0.4;0.85) | 0.003 |
| No | 949 (67.1%) | 162 (17.1%) | 787 (82.9%) | Ref |  |
| **Age** |  |  |  |  |  |
| Mean years (SD)d | 71.5 (15.2) | 64.0 (13.6) | 72.8 (15.1) | 0.96 (0.96;0.97) | <0.001\* |
| **Age group** |  |  |  |  |  |
| >=60y | 1118 (79.1%) | 141 (12.6%) | 977 (87.4%) | 0.44(0.32;0.61) | <0.001 |
| 18-59y | 296 (20.9%) | 73 (24.7%) | 223 (75.3%) | Ref |  |
| **Gender** |  |  |  |  |  |
| Male | 804 (56.9%) | 135 (16.8%) | 669 (83.2%) | 1.36(1.01;1.84) | 0.046 |
| Female | 610 (43.1%) | 79 (13.0%) | 531 (87.0%) | Ref |  |
| **Comorbidities** |  |  |  |  |  |
| Yes | 1127 (79.7%) | 164 (14.6%) | 963 (85.4%) | 0.81(0.57;1.15) | 0.230 |
| No | 287 (20.3%) | 50 (17.4%) | 237 (82.6%) | Ref |  |
| **COPDe** |  |  |  |  |  |
| Yes | 461 (32.6%) | 74 (16.1%) | 387 (83.9%) | 1.11(0.8;1.51) | 0.502 |
| No | 953 (67.4%) | 140 (14.7%) | 813 (85.3%) | Ref |  |
| **Obesity (BMI>30)f** |  |  |  |  |  |
| Yes | 111 (7.85%) | 23 (20.7%) | 88 (79.3%) | 1.53(0.92;2.44) | 0.098 |
| No | 1303 (92.1%) | 191 (14.7%) | 1112 (85.3%) | Ref |  |
| **Diabetes** |  |  |  |  |  |
| Yes | 385 (27.2%) | 60 (15.6%) | 325 (84.4%) | 1.05(0.75;1.45) | 0.767 |
| No | 1029 (72.8%) | 154 (15.0%) | 875 (85.0%) | Ref |  |
| **Chronic renal disease** | |  |  |  |  |
| Yes | 275 (19.4%) | 31 (11.3%) | 244 (88.7%) | 0.67 (0.44;0.99) | 0.043 |
| No | 1139 (80.6%) | 183 (16.1%) | 956 (83.9%) | Ref |  |
| **Immunodeficiency** |  |  |  |  |  |
| Yes | 230 (16.3%) | 33 (14.3%) | 197 (85.7%) | 0.93(0.61;1.30) | 0.728 |
| No | 1184 (83.7%) | 181 (15.3%) | 1003 (84.7%) | Ref |  |
| **Cardiovascular disease** | |  |  |  |  |
| Yes | 614 (43.4%) | 79 (12.9%) | 535 (87.1%) | 0.73(0.54;0.98) | 0.037 |
| No | 800 (56.6%) | 135 (16.9%) | 665 (83.1%) | Ref |  |
| **Chronic liver disease** | |  |  |  |  |
| Yes | 88 (6.22%) | 24 (27.3%) | 64 (72.7%) | 2.25(1.35;3.64) | 0.002 |
| No | 1326 (93.8%) | 190 (14.3%) | 1136 (85.7%) | Ref. |  |
| **Other comorbidities g** | |  |  |  |  |
| Yes | 165 (11.7%) | 27 (16.4%) | 138 (83.6%) | 1.12(0.70;1.71) | 0.630 |
| No | 1249 (88.3%) | 187 (15.0%) | 1062 (85.0%) | Ref. |  |
| **Pregnancy h** |  |  |  |  |  |
| Yes | 8 (12.3%) | 2 (25.0%) | 6 (75.0%) | 1.19(0.21;6.69) | 0.839 |
| No | 55 (87.7%) | 12 (21.8%) | 43 (78.2%) | Ref |  |
| **NI i treatment** |  |  |  |  |  |
| Yes | 1299 (91.9%) | 199 (15.3%) | 1100 (84.7%) | 1.18(0.69; 2.17) | 0.552 |
| No | 114 (8.07%) | 15 (13.2%) | 99 (86.8%) | Ref. |  |
| **NI treatment (timing)** |  |  |  |  |  |
| <=48h from onset of symptoms | 511 (36.9%) | 62 (12.1%) | 449 (87.9%) | 0.91(0.51;1.72) | 0.750 |
| >48h from onset of symptoms | 759 (54.8%) | 128 (16.9%) | 631 (83.1%) | 1.33(0.77;2.45) | 0.323 |
| No | 114 (8.24%) | 15 (13.2%) | 99 (86.8%) | Ref |  |
| **Influenza virus type** |  |  |  |  |  |
| A | 551 (39.1%) | 92 (16.7%) | 459 (83.3%) |  |  |
| B | 859 (60.9%) | 122 (14.2%) | 737 (85.8%) | 0.83 (0.62;1.11) | 0.205 |
| **LOSi** |  |  |  |  |  |
| Mean days (SD)d | 12.8 (15.9) | 22.4 (20.3) | 11.1 (14.4) |  | <0.001\* |

a ICU: Intensive Care Unit; b OR: crude Odds ratio ;c CI: Confidence Interval; d SD: Standard Deviation; e COPD= Chronic obstructive pulmonary disease ;f BMI : Body mass index; g Other comorbidities: include hemoglobinopathy, severe neurological disorder and cognitive impairment ; **h** Only women of childbearing age (from 18-49y)= 63 cases ; 14 admitted to ICU and 49 not required ICU admission. i NI: Neuraminidase inhibitor

j LOS: Length hospital stay; \* t Student