**Table 1.** Clinical characteristics of adult patients with OHCA according to the instruction method.

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | Audio instruction (n=1722) | Video instruction (n=387) | p-value |
| **Clinical findings** |  |  |  |
| Female | 635 (36.9%) | 124 (32.0%) | 0.0734 |
| Average age (mean ± SD), years | 72.2 ± 14.7 | 64.9 ± 16.2 |  |
| Elderly (≥ 65yr) | 1260 (73.2%) | 214 (55.3%) | <0.0001 |
| Hypertension | 616 (35.8%) | 127 (32.8%) | 0.2715 |
| Diabetes mellitus | 419 (24.3%) | 81 (20.9%) | 0.1551 |
| Coronary artery disease | 328 (19.0%) | 71 (18.3%) | 0.7503 |
| Cerebrovascular disease | 184 (10.7%) | 33 (8.5%) | 0.2068 |
| Cancer  | 245 (14.2%) | 54 (14.0%) | 0.8889 |
| **CPR location** |  |  | <0.0001 |
| Home | 1239 (72.0%) | 240 (62.0%) |  |
| Medical/nursing institution | 184 (10.7%) | 21 (5.4%) |  |
|  Other places | 299 (17.4%) | 126 (32.6%) |  |
| **Time from collapse to CPR** |  |  | 0.0640 |
| < 4 min | 80 (4.6%) | 14 (3.6%) |  |
| ≥ 4 to < 8 min | 473 (27.5%) | 122 (31.5%) |  |
| ≥ 8 to < 15 min | 845 (49.1%) | 197 (50.9%) |  |
| ≥ 15 min  | 324 (18.8%) | 54 (14.0%) |  |
| **Outcome** |  |  |  |
| First rhythm of paramedics |  |  | <0.0001 |
| Asystole | 869 (50.5%) | 140 (36.2%) |  |
| PEA | 494 (28.7%) | 94 (24.3%) |  |
| VT/VF | 359 (20.8%) | 153 (39.5%) |  |
| Out-of-hospital ROSC  | 239 (13.9%) | 115 (29.7%) | <0.0001 |
| Survival to discharge | 211 (12.3%) | 105 (27.1%) | <0.0001 |
| Favorable neurologic outcome  | 117 (6.8%) | 75 (19.4%) | <0.0001 |

PEA, pulseless electrical activity; ROSC, return of spontaneous circulation; SD, standard deviation; VF, ventricular fibrillation; VT, ventricular tachycardia

a Data are shown as the numbers of subjects (percentage) for discrete and categorical variables and the mean ± standard deviation.

**Table 2.** Binary logistic regression analysis of the adjusted odds ratio of the favorable neurologic outcome in adult patients with OHCA.

|  |  |  |
| --- | --- | --- |
| Variable | Univariable model | Multivariable model |
|  | OR (95% CI) | p-value | aOR (95% CI) | p-value |
| Older age (yes vs. no) | 0.13 (0.10-0.19 | <0.001 | 0.19 (0.13-0.27) | <0.001 |
| Gender (male vs. female) | 3.05 (2.07-4.51) | <0.001 | 1.92 (1.26-2.92) | <0.003 |
| **Time from collapse to CPR** |  |  |  |  |
| < 4 min | 1.0 (reference) | - | 1.0 (reference) | - |
| ≥ 4 to < 8 min | 1.27 (0.65-2.49) | 0.477 | 1.10 (0.53-2.31) | 0.792 |
| ≥ 8 to < 15 min | 0.66 (0.34-1.29) | 0.225 | 0.63 (0.30-1.31) | 0.213 |
|  ≥ 15 min | 0.23 (0.10-0.54) | <0.001 | 0.26 (0.10-0.67) | 0.005 |
| **Underlying disease** |  |  |  |  |
| Hypertension | 0.72 (0.52-0.99) | 0.046 | 1.36 (0.92-2.01) | 0.123 |
| Diabetes mellitus | 0.45 (0.29-0.70) | <0.001 | 0.57 (0.35-0.93) | 0.025 |
| Coronary artery disease | 1.35 (0.95-1.92) | 0.095 | 1.85 (1.23-2.78) | 0.003 |
| Cerebrovascular disease | 0.36 (0.17-0.73) | 0.005 | 0.65 (0.31-1.39) | 0.271 |
| Cancer | 0.24 (0.12-0.50) | <0.001 | 0.41 (0.19-0.87) | 0.020 |
| **CPR location** |  |  |  |  |
| Home | 1.0 (reference) | - | 1.0 (reference) | - |
| Medical/nursing institution | 0.39 (0.15-0.96) | 0.041 | 0.52 (0.20-1.32) | 0.169 |
| Others | 4.56 (3.34-6.23) | <0.001 | 2.33 (1.63-3.32) | <0.001 |
| **Type of DA-CPR**  |  |  |  |  |
| Audio instruction  | 1.0 (reference) | - | 1.0 (reference) | - |
| Video instruction  | 3.30 (2.41-4.52) | <0.001 | 2.11 (1.48-3.01) | <0.001 |

OR, odd ratio; aOR, adjusted OR; CI, confidence interval

**Table 3.** Binary logistic regression analysis of the adjusted odds ratio of the survival to discharge in adult patients with OHCA.

|  |  |  |
| --- | --- | --- |
| Variable | Univariable model | Multivariable model |
|  | OR (95% CI) | p-value | aOR (95% CI) | p-value |
| Older age (yes vs. no) | 0.17 (0.13-0.22) | <0.001 | 0.22 (0.17-0.30) | <0.001 |
| Gender (male vs. female) | 2.55 (1.90-3.41) | <0.001 | 1.77 (1.28-2.44) | <0.003 |
| **Time from collapse to CPR** |  |  |  |  |
| < 4 min | 1.0 (reference) | - | 1.0 (reference) | - |
| ≥ 4 to < 8 min | 1.38 (0.79-2.41) | 0.258 | 1.31 (0.71-2.43) | 0.390 |
| ≥ 8 to < 15 min | 0.69 (0.39-1.19) | 0.183 | 0.70 (0.38-1.29) | 0.255 |
|  ≥ 15 min | 0.30 (0.15-0.58) | <0.001 | 0.34 (0.17-0.72) | 0.005 |
| **Underlying disease** |  |  |  |  |
| Hypertension | 0.65 (0.50-0.84) | 0.001 | 1.10 (0.80-1.51) | 0.568 |
| Diabetes mellitus | 0.47 (0.34-0.66) | <0.001 | 0.60 (0.41-0.88) | 0.009 |
| Coronary artery disease | 1.41 (1.06-1.88) | 0.018 | 1.97 (1.41-2.75) | <0.001 |
| Cerebrovascular disease | 0.42 (0.25-0.71) | 0.001 | 0.69 (0.39-1.20) | 0.189 |
| Cancer | 0.21 (0.11-0.37) | <0.001 | 0.31 (0.17-0.58) | <0.001 |
| **CPR location** |  |  |  |  |
| Home | 1.0 (reference) | - | 1.0 (reference) | - |
| Medical/nursing institution | 0.90 (0.54-1.48) | 0.675 | 1.15 (0.67-1.98) | 0.603 |
| Others | 4.60 (3.54-5.98) | <0.001 | 2.50 (1.85-3.38) | <0.001 |
| **Type of DA-CPR**  |  |  |  |  |
| Audio instruction | 1.0 (reference) | - | 1.0 (reference) | - |
| Video instruction  | 2.67 (2.04-3.48) | <0.001 | 1.81 (1.33-2.46) | <0.001 |

OR, odd ratio; aOR, adjusted OR; CI, confidence interval