**Table 1. Participants' sociodemographics**

|  |  |  |  |
| --- | --- | --- | --- |
| Category | Subcategory | Frequency | % |
| Gender |  |  |  |
|  | Male | 204 | 51.9 |
|  | Female | 189 | 48.1 |
| Age (years) |  |  |  |
|  | 18-25 | 122 | 31 |
|  | 26-35 | 78 | 19.8 |
|  | 36-45 | 65 | 16.5 |
|  | 46-55 | 49 | 12.5 |
|  | 56-64 | 79 | 20.1 |
| Marital Status |  |  |  |
|  | Single | 174 | 44.3 |
|  | Married | 211 | 53.7 |
|  | Divorced | 5 | 1.3 |
|  | Widow | 3 | .8 |
| Education |  |  |  |
|  | Lower school | 40 | 10.2 |
|  | High school | 205 | 52.2 |
|  | Undergraduate | 40 | 10.2 |
|  | Diploma | 70 | 17.8 |
|  | Master | 25 | 6.4 |
|  | PhD | 2 | .5 |
|  | Others | 11 | 2.8 |
| Employment Status |  |  |  |
|  | Housewife | 27 | 6.9 |
|  | Employed | 200 | 50.9 |
|  | Self-employed | 65 | 16.5 |
|  | Unemployed | 13 | 3.3 |
|  | Student | 66 | 16.8 |
|  | Retired | 22 | 5.6 |
| Race |  |  |  |
|  | Malay | 213 | 54.2 |
|  | Chines | 119 | 30.3 |
|  | Indian | 57 | 14.5 |
|  | Others | 4 | 1.0 |
| Monthly income |  |  |  |
|  | less than 2000 | 269 | 68.4 |
|  | 2000-3999 | 81 | 20.6 |
|  | 4000-6000 | 42 | 10.7 |
|  | more than 6000 | 1 | .3 |
| Medical history |  |  |  |
|  | Hypertension | 67 | 17 |
|  | Diabetes | 50 | 12.7 |
|  | Dyslipidaemia | 61 | 15.5 |
|  | Heart diseases | 15 | 3.8 |
|  | Stroke | 7 | 1.8 |
|  | Other diseases | 4 | 1 |

**Table 2. Awareness of each symptom of stroke and appropriate action**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage % of answer Yes | | | | | | | | |  |
| Characteristics | Sudden confusion, trouble speaking or understanding speech | Sudden nosebleed  (trap question) | Sudden numbness or weakness of face, arm or leg | Sudden trouble seeing in one or both eyes) | Sudden vomiting  (trap question) | Sudden trouble walking, dizziness, loss of balance or coordination | Sudden severe headache with no known cause | High temperature  (trap question) | Call an ambulance (999) |
|  | YES | NO | YES | YES | NO | YES | Yes | No | Call999 |
| Total | **67.9** | **57** | **78.6** | **42** | **58.3** | **74.6** | **57.55** | **76.3** | **29.8** |
| Gender | | | | | | | | |  |
| Male  Female  *@p-value* | 61.3 | 52.5 | 74.5 | 38.2 | 58.3 | 70.1 | 56.4 | 74.5 | 27.9 |
| 75.1 | 61.9 | 83.1 | 46 | 58.2 | 79.4 | 58.7 | 78.3 | 31.7 |
| **0.00\*** | 0.05 | **0.03\*** | 0.11 | 0.97 | **0.03\*** | 0.63 | 0.37 | 0.41 |
| Age | | | | | | | | |  |
| 18-25  26-35  36-45  46-55  56-64  *&p-value* | 53.3 | 56.6 | 70.5 | 36.9 | 55.7 | 74.6 | 54.1 | 75.4 | 27.9 |
| 67.9 | 60.3 | 84.6 | 42.3 | 56.4 | 70.5 | 50 | 74.4 | 24.4 |
| 80 | 55.4 | 84.6 | 52.3 | 61.5 | 78.5 | 64.6 | 86.2 | 35.4 |
| 79.6 | 51 | 83.7 | 51 | 51 | 83.7 | 67.3 | 75.5 | 38.8 |
| 73.4 | 59.5 | 77.2 | 35.4 | 65.8 | 69.6 | 58.2 | 72.2 | 27.8 |
| **0.00\*** | 0.85 | 0.06 | 0.12 | 0.45 | **0.00\*** | 0.22 | 0.34 | 0.36 |
| M. Status | | | | | | | | |  |
| Single  Married  Divorce  Widow  *&p-value* | 58.6 | 56.9 | 74.1 | 37.9 | 52.3 | 73 | 54 | 73.6 | 29.3 |
| 75.4 | 57.3 | 82.5 | 45.5 | 63 | 76.8 | 60.7 | 78.2 | 29.9 |
| 60 | 40 | 80 | 20 | 60 | 60 | 20 | 100 | 40 |
| 100 | 66.7 | 66.7 | 66.7 | 66.7 | 33.3 | 100 | 66.7 | 33.3 |
| **0.00\*** | 0.87 | 0.24 | 0.26 | 0.20 | 0.25 | 0.07 | 0.41 | 0.96 |

\**P-value* <0.05 *@* Mann-Whitney & Kruskal-Wallis

**Table 2. (cont.) Awareness of each symptom of stroke and appropriate action**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Race | | | | | | | | |  |
| Malay  Chines  Indian  Others  *&p-value* | 69 | 57.3 | 82.2 | 44.6 | 57.3 | 75.1 | 57.7 | 80.3 | 26.8 |
| 74.8 | 56.3 | 81.5 | 46.2 | 63.9 | 77.3 | 59.7 | 73.1 | 34.5 |
| 52.6 | 57.9 | 63.2 | 22.8 | 49.1 | 70.2 | 54.4 | 70.2 | 31.6 |
| 25 | 50 | 25 | 50 | 75 | 25 | 25 | 50 | 25 |
| **0.00\*** | 0.98 | **0.00\*** | **0.01\*** | 0.257 | 0.09 | 0.53 | 0.15 | 0.51 |
| Education | | | | | | | | |  |
| Lower school  Second school  Undergraduate  Diploma  Master  PhD  Other  *&p-value* | 65 | 62.5 | 65 | 40 | 55 | 57.5 | 47.5 | 75 | 40 |
| 71.7 | 56.6 | 80 | 44.4 | 62.4 | 78.5 | 59.5 | 76.1 | 27.8 |
| 80 | 62.5 | 87.5 | 40 | 52.5 | 80 | 55 | 72.5 | 32.5 |
| 48.6 | 60 | 72.9 | 37.1 | 57.1 | 70 | 60 | 81.4 | 28.6 |
| 84 | 36 | 96 | 60 | 44 | 80 | 60 | 72 | 24 |
| 50 | 50 | 100 | 0.0 | 100 | 100 | 100 | 100 | 50 |
| 54.5 | 54.5 | 63.6 | 9.1 | 45.5 | 54.5 | 36.4 | 72.7 | 36.4 |
| **0.00\*** | 0.44 | **0.02\*** | 0.09 | 0.37 | **0.04\*** | 0.44 | 0.88 | 0.73 |
| Monthly income | | | | | | | | |  |
| Less than2000  2000-3999  4000-6000  More than6000  *&p-value* | 61.3 | 56.5 | 74 | 39.8 | 59.9 | 72.5 | 56.9 | 74.7 | 28.3 |
| 86.4 | 58 | 87.7 | 45.7 | 54.3 | 75.3 | 54.3 | 81.5 | 37 |
| 73.8 | 59 | 90.5 | 47.6 | 54.8 | 88.1 | 69 | 78.6 | 26.2 |
| 100 | 0.0 | 100 | 100 | 100 | 0.0 | 0.0 | 0.0 | 0.0 |
| **0.00\*** | 0.68 | **0.01\*** | 0.40 | 0.63 | 0.05 | 0.25 | 0.17 | 0.38 |
| Employment | | | | | | | | |  |
| House wife  Employed  Self-employment  Unemployed  Student  Retired  *&p-value* | 92.6 | 66.7 | 85.2 | 48.1 | 70.4 | 81.5 | 70.4 | 77.8 | 29.6 |
| 64.5 | 54.5 | 75 | 38.5 | 61 | 71.5 | 51.5 | 78 | 24 |
| 78.5 | 61.5 | 86.2 | 55.4 | 50.8 | 76.9 | 63.1 | 72.3 | 43.1 |
| 84.6 | 69.2 | 84.6 | 30.8 | 61.5 | 69.2 | 46.2 | 61.5 | 38.5 |
| 51.5 | 59.1 | 75.8 | 39.4 | 56.1 | 78.8 | 62.1 | 80.3 | 33.3 |
| 67.9 | 40.9 | 86.4 | 40.9 | 45.5 | 77.3 | 72.7 | 68.2 | 27.3 |
| **0.00\*** | 0.37 | 0.32 | 0.21 | 0.36 | 0.73 | 0.11 | 0.56 | 0.08 |

\**P-value* <0.05 *@* Mann-Whitney & Kruskal-Wallis

**Table 2 (cont.) Awareness of each symptom of stroke and appropriate action**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Heard about stroke | | | | | | | | |  |
| Yes | 70.4 | 57.5 | 82.9 | 44.3 | 56.6 | 77.8 | 59 | 76.6 | 30.2 |
| N0 | 54.2 | 54.2 | 54.2 | 28.8 | 67.8 | 55.9 | 49.2 | 74.6 | 27.1 |
| *@p-value* | **0.01\*** | 0.64 | **0.00\*** | **0.02\*** | 0.10 | **0.00\*** | 0.15 | 0.73 | .62 |
| History of stroke among relatives, acquaintances or neighbors | | | | | | | | |  |
| Yes | 70.8 | 57.1 | 86.3 | 45.7 | 56.6 | 80.8 | 63 | 77.2 | 28.8 |
| No | 64.4 | 56.9 | 69 | 37.4 | 60.3 | 66.7 | 50.6 | 75.3 | 31 |
| *@p-value* | 0.17 | 0.97 | **0.00\*** | 0.09 | 0.45 | **0.00\*** | **0.01\*** | 0.66 | 0.62 |
| Received any information related to stroke by public service announcements and or internet | | | | | | | | |  |
| Yes | 69.7 | 57.9 | 81 | 45.9 | 56.6 | 75.5 | 63.1 | 76.6 | 29 |
| No | 63.1 | 54.4 | 71.8 | 31.1 | 63.1 | 71.8 | 41.7 | 75.7 | 32 |
| *@p-value* | 0.22 | 0.53 | 0.05 | **0.00\*** | 0.24 | 0.46 | **0.00\*** | 0.86 | 0.55 |
| Hypertension | | | | | | | | |  |
| Yes | 71.6 | 58.2 | 76.1 | 37.3 | 62.7 | 71.6 | 52.2 | 74.6 | 25.4 |
| No | 67.2 | 56.7 | 79.1 | 42.9 | 57.4 | 75.2 | 58.6 | 76.7 | 30.7 |
| *@p-value* | 0.47 | 0.82 | 0.58 | 0.39 | 0.42 | 0.54 | 0.33 | 0.71 | 0.38 |
| Diabetes | | | | | | | | |  |
| Yes | 30 | 58 | 70 | 40 | 60 | 68 | 60 | 68 | 28 |
| No | 32.4 | 56.9 | 79.9 | 42.3 | 58 | 75.5 | 57.1 | 77.6 | 30 |
| *@p-value* | 0.73 | 0.87 | 0.11 | 0.76 | 0.79 | 0.25 | 0.70 | 0.13 | 0.76 |
| Dyslipidaemia | | | | | | | | |  |
| Yes | 72.1 | 67.2 | 77 | 42.6 | 55.7 | 77 | 60.7 | 68.9 | 39.3 |
| No | 67.2 | 55.1 | 78.9 | 41.9 | 58.7 | 74.1 | 56.9 | 77.7 | 28 |
| *@p-value* | 0.44 | 0.08 | 0.74 | 0.91 | 0.66 | 0.62 | 0.58 | 0.13 | 0.07 |
| Being aware stroke requires prompt treatment | | | | | | | | |  |
| Yes | 71.5 | 57 | 82.6 | 45 | 58.1 | 78.3 | 60.4 | 77.2 | 30.8 |
| Sometimes | 39.1 | 47.8 | 52.2 | 8.7 | 52.2 | 43.5 | 21.7 | 60.9 | 17.4 |
| No | 36.8 | 68.4 | 36.8 | 26.3 | 68.4 | 42.1 | 47.4 | 78.9 | 26.3 |
| *&p-value* | **0.00\*** | 0.40 | **0.00\*** | **0.00\*** | 0.56 | **0.00\*** | **0.00\*** | 0.19 | 0.37 |

\**P-value* <0.05 *@* Mann-Whitney & Kruskal-Wallis

**Table 3. Awareness of stroke symptom by number of symptoms**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage % of answer Yes | | | | | | | | |  |
| Characteristics | 1≥ | 2≥ | 3≥ | 4≥ | A (5SS) | 6≥ | 7≥ | 8≥ | B (Excellent Awareness) |
| Total | 88.8 | 83.2 | 71 | 50.1 | 27.5 | 28.5 | 11.5 | 3.3 | 9.4 |
| Gender | | | | | | | | | |
| Male  Female  *@p*-*value* | 86.3 | 79.9 | 65.2 | 44.6 | 24.5 | 27.9 | 10.8 | 2.9 | 8.8 |
| 91.5 | 86.8 | 77.2 | 56.1 | 30.7 | 29.1 | 12.2 | 3.7 | 10.1 |
| 0.09 | 0.06 | **0.00\*** | **0.02\*** | 0.17 | 0.79 | 0.66 | 0.67 | 0.67 |
| Age | | | | | | | | | |
| 18-25  26-35  36-45  46-55  56-64  *&p-value* | 88.5 | 77 | 65.6 | 41.8 | 16.4 | 20.5 | 8.2 | 4.1 | 5.7 |
| 89.7 | 83.3 | 67.9 | 48.7 | 25.6 | 28.2 | 10.3 | 1.3 | 5.1 |
| 90.8 | 90.8 | 76.9 | 63.1 | 38.5 | 33.8 | 16.9 | 3.1 | 10.8 |
| 89.8 | 89.8 | 79.6 | 65.3 | 40.8 | 44.9 | 16.3 | 4.1 | 18.4 |
| 86.1 | 82.3 | 72.2 | 44.3 | 29.1 | 26.6 | 10.1 | 3.8 | 12.7 |
| 0.91 | 0.11 | 0.28 | **0.01\*** | **0.00\*** | 0.02\* | 0.33 | 0.84 | **0.00\*** |
| Martial. Status | | | | | | | | | |
| Single  Married  Divorce  Widow  *&p-value* | 89.1 | 79.3 | 66.1 | 44.8 | 18.4 | 25.9 | 10.3 | 2.9 | 6.9 |
| 88.6 | 86.7 | 75.4 | 54.5 | 35.5 | 30.8 | 12.3 | 3.3 | 11.8 |
| 80 | 60 | 60 | 40 | 0.0 | 20 | 0.0 | 0.0 | 0.0 |
| 100 | 100 | 66.7 | 66.7 | 33.3 | 33.3 | 33.3 | 33.3 | 0.0 |
| 0.85 | 0.09 | 0.23 | 0.25 | **0.00\*** | 0.71 | 0.48 | **0.03\*** | 0.30 |
| Race | | | | | | | | | |
| Malay  Chines  Indian  Others  *&p-value* | 92 | 86.4 | 71.4 | 52.1 | 26.8 | 31 | 12.2 | 2.8 | 8.9 |
| 89.1 | 85.7 | 74.8 | 55.5 | 34.5 | 26.9 | 9.2 | 3.4 | 11.8 |
| 78.9 | 70.2 | 64.9 | 33.3 | 15.8 | 22.8 | 12.3 | 3.5 | 7 |
| 50 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 0.0 |
| **0.00\*** | **0.00\*** | 0.11 | **0.02\*** | 0.07 | 0.63 | 0.69 | 0.10 | 0.65 |
| Education | | | | | | | | | |
| Lower school  Second school  Undergraduate  Diploma  Master  PhD  Other  *&p-value* | 80 | 72.5 | 62.5 | 40 | 20 | 22.5 | 10 | 2.5 | 12.5 |
| 89.3 | 85.9 | 74.1 | 53.2 | 31.7 | 30.7 | 12.2 | 2.9 | 9.8 |
| 92.5 | 85 | 80 | 60 | 25 | 25 | 10 | 2.5 | 10 |
| 87.1 | 78.6 | 60 | 40 | 22.9 | 20 | 7.1 | 2.9 | 7.1 |
| 96 | 88 | 88 | 72 | 36 | 60 | 28 | 12 | 12 |
| 100 | 100 | 100 | 50 | 0.0 | 0.00 | 0.0 | 0.0 | 0.0 |
| 90.9 | 81.8 | 38.4 | 9.1 | 0.0 | 9.1 | 0.0 | 0.0 | 0.0 |
| 0.48 | 0.39 | **0.00\*** | **0.00\*** | 0.13 | **0.00\*** | 0.12 | 0.35 | 0.87 |

\**P-value* <0.05 *@* Mann-Whitney & Kruskal-Wallis

A (Aware of the five Symptoms and signs of stroke)

B (Excellent awareness that knows all five symptoms and appropriate action towards stroke)

**Table 3 (cont.). Awareness of stroke symptom by number of symptoms**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Percentage % of answer Yes | | | | | | | | | | | | | | |
| Characteristics | **1≥** | **2≥** | **3≥** | **4≥** | **A (5SS)** | | | **6≥** | | **7≥** | **8≥** | | **B (Excellent Awareness)** | |
| Monthly income | | | | | | | | | | | | | | |
| Less than 2000  2000-3999  4000-6000  More than 6000  *&p-value* | 87 | 79.6 | 66.9 | 46.1 | | 24.9 | 26.4 | | 11.2 | | | 3.7 | | 7.8 |
| 92.6 | 90.1 | 79 | 58 | | 29.6 | 33.3 | | 11.1 | | | 1.2 | | 16 |
| 92.9 | 92.9 | 81 | 61.9 | | 40.5 | 33.3 | | 14.3 | | | 4.8 | | 7.1 |
| 100 | 100 | 100 | 0.0 | | 0.0 | 0.0 | | 0.0 | | | 0.0 | | 0.0 |
| 0.41 | **0.03\*** | 0.06 | 0.06 | | 0.17 | 0.49 | | 0.92 | | | 0.67 | | 0.14 |
| Employment | | | | | | | | | | | | | | |
| Housewife  Employed  Self-employment  Unemployed  Student  Retired  *&p-value* | 96.3 | 96.3 | 85.2 | 63 | | 37 | 33.3 | | 7.4 | | | 0.0 | | 14.8 |
| 87 | 81 | 63.5 | 45 | | 24.5 | 24.5 | | 9 | | | 2 | | 6 |
| 90.8 | 86.2 | 81.5 | 58.5 | | 43.1 | 36.9 | | 18.5 | | | 4.6 | | 20 |
| 84.6 | 84.6 | 76.9 | 61.5 | | 7.7 | 30.8 | | 7.7 | | | 0.0 | | 0.0 |
| 90.9 | 80.3 | 71.2 | 47 | | 18.2 | 22.7 | | 10.6 | | | 3 | | 10.6 |
| 86.4 | 86.4 | 86.4 | 59.1 | | 36.4 | 50 | | 22.7 | | | 18.2 | | 4.5 |
| 0.68 | 0.41 | **0.01\*** | 0.19 | | **0.00\*** | 0.06 | | 0.17 | | | **0.00\*** | | **0.01\*** |
| Have you heard of stroke (knowledge of stroke) | | | | | | | | | | | | | | |
| Yes | 91.3 | 86.8 | 74.6 | 52.7 | | 29 | 31.4 | | 12.6 | | | 3.6 | | 10.5 |
| N0 | 74.6 | 62.7 | 50.8 | 35.6 | | 18.6 | 11.9 | | 5.1 | | | 1.7 | | 3.4 |
| *P-value* | **0.00\*** | **0.00\*** | **0.00\*** | **0.01\*** | | 0.09 | **0.00\*** | | 0.09 | | | 0.45 | | 0.08 |
| History of stroke among relatives, acquaintances or neighbors | | | | | | | | | | | | | | |
| Yes | 93.2 | 88.1 | 77.2 | 55.7 | | 32.4 | 31.5 | | 13.7 | | | 5 | | 10.5 |
| No | 83.3 | 77 | 63.2 | 43.1 | | 21.3 | 24.7 | | 8.6 | | | 1.1 | | 8 |
| *@P-value* | **0.00\*** | **0.00\*** | **0.00\*** | **0.01\*** | | **0.01\*** | 0.13 | | 0.11 | | | **0.03\*** | | 0.40 |
| Received any information related to stroke by public service announcements and or internet | | | | | | | | | | | | | | |
| Yes | 90.3 | 85.2 | 72.8 | 54.8 | | 32.1 | 30.3 | | 13.1 | | | 3.8 | | 11 |
| No | 84.5 | 77.7 | 66 | 36.9 | | 14.6 | 23.3 | | 6.8 | | | 1.9 | | 4.9 |
| *@P-value* | 0.10 | 0.08 | 0.19 | **0.00\*** | | **0.00\*** | 0.17 | | 0.08 | | | 0.36 | | 0.06 |
| Hypertension | | | | | | | | | | | | | | |
| Yes | 85.1 | 80.6 | 74.6 | 43.3 | | 25.4 | 23.9 | | 9 | | | 3 | | 3 |
| No | 89.6 | 83.7 | 70.2 | 51.5 | | 27.9 | 29.4 | | 12 | | | 3.4 | | 10.7 |
| *@P-value* | 0.28 | 0.53 | 0.47 | 0.21 | | 0.67 | 0.35 | | 0.48 | | | 0.87 | | **0.04\*** |
| Diabetes | | | | | | | | | | | | | | |
| Yes | 80 | 78 | 66 | 50 | | 34 | 34 | | 18 | | | 10 | | 4 |
| No | 90.1 | 84 | 71.7 | 50.1 | | 26.5 | 27.7 | | 10.5 | | | 2.3 | | 10.2 |
| *@P-value* | **0.03\*** | 0.29 | 0.40 | 0.98 | | 0.26 | 0.35 | | 0.12 | | | **0.00\*** | | 0.16 |
| Dyslipidaemia | | | | | | | | | | | | | | |
| Yes | 86.9 | 82 | 70.5 | 54.1 | | 36.1 | 34.4 | | 13.1 | | | 1.6 | | 13.1 |
| No | 89.2 | 83.4 | 71.1 | 49.4 | | 25.9 | 27.4 | | 11.1 | | | 3.6 | | 8.7 |
| *@P-value* | 0.60 | 0.77 | 0.92 | 0.50 | | 0.10 | 0.26 | | 0.65 | | | 0.42 | | 0.28 |
| Being aware stroke requires prompt treatment | | | | | | | | | | | | | | |
| Yes | 92.6 | 87.2 | 75.5 | 53.6 | | 29.1 | 30.8 | | 12.3 | | | 3.4 | | 10.5 |
| Sometimes | 60.9 | 52.2 | 30.4 | 13 | | 8.7 | 8.7 | | 4.3 | | | 4.3 | | 0.0 |
| No | 52.6 | 47.4 | 36.8 | 31.6 | | 21.1 | 10.5 | | 5.3 | | | 0.0 | | 0.0 |
| *&P-value* | **0.00\*** | **0.00\*** | **0.00\*** | **0.00\*** | | 0.08 | **0.01\*** | | 0.35 | | | 0.69 | | 0.08 |

*\*P-value* <0.05 *@* Mann-Whitney & Kruskal-Wallis

A (Five Symptoms and signs of stroke)

B (Excellent awareness that knows all five symptoms and appropriate action towards stroke

**Table 4. Multivariable logistic regression analysis factors related to excellent awareness of five stroke symptoms and appropriate action (call ambulance)**

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | *P-value* | Odds ratio | 95% Cl |
| Age | | | |
| 18-25 | **0.010\*** | 0.054 | 0.006-0.500 |
| 26-35 | **0.003\*** | 0.116 | 0.028-0.481 |
| 36-45 | **0.043\*** | 0.282 | 0.083-0.963 |
| 46-55 | 0.506 | 0.667 | 0.202-2.201 |
| 55-64 |  |  |  |
| Employment status | | | |
| Hose wife | 0.097 | 8.160 | 0.683-97.430 |
| Employed | 0.276 | 3.445 | 0.372-31.908 |
| Self employed | **0.028\*** | 12.430 | 1.317-117.281 |
| Unemployed | 0.999 | 0.000 | 0.000 |
| Student | **0.020\*** | 35.945 | 1.745-740.615 |
| Retired |  |  |  |
| Heard about heart attack and stroke | | | |
| No |  |  |  |
| Yes | 0.467 | 1.793 | 0.372-8.650 |
| Received any information related to stroke by public service announcements or internet. | | | |
| No |  |  |  |
| Yes | 0.122 | 2.349 | 0.797-6.929 |
| Hypotension | | | |
| No |  |  |  |
| Yes | **0.015\*** | 0.129 | 0.025-0.673 |
| Diabetic | | | |
| No |  |  |  |
| Yes | 0.194 | 3.076 | 0.565-16.746 |
| Dyslipidaemia | | | |
| No |  |  |  |
| Yes | 0.438 | 0.640 | 0.207-1.976 |
| Being aware stroke requires prompt treatment | | | |
| Yes | 0.999 | 1 | 1 |
| No |  |  |  |

\**P-value* <0.05

**STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies***

|  |  |  |  |
| --- | --- | --- | --- |
| **Section/ topic** | **Item No** | **Recommendation** | **Reported on page #** |
| **Title and abstract** | 1 | (*a*) Indicate the study’s design with a commonly used term in the title or the abstract | 1 |
| (*b*) Provide in the abstract an informative and balanced summary of what was done and what was found | 2 |
| **Introduction** | | |  |
| Background/rationale | 2 | Explain the scientific background and rationale for the investigation being reported | 3-4 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses | 4 |
| **Methods** | | |  |
| Study design | 4 | Present key elements of study design early in the paper | 4 |
| Setting | 5 | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection | 4 |
| Participants | 6 | (*a*) *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants | 4 |
|
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable | na |
| Data sources/ measurement | 8\* | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group | 6 |
| Bias | 9 | Describe any efforts to address potential sources of bias | na |
| Study size | 10 | Explain how the study size was arrived at | 4 |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why | 4-5 |
| Statistical methods | 12 | (*a*) Describe all statistical methods, including those used to control for confounding | 5 |
| (*b*) Describe any methods used to examine subgroups and interactions | na |
| (*c*) Explain how missing data were addressed | na |
| (*d*) *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy | na |
| (*e*) Describe any sensitivity analyses | na |

|  |  |  |  |
| --- | --- | --- | --- |
| **Results** | | |  |
| Participants | 13\* | (a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed | 6 |
| (b) Give reasons for non-participation at each stage | na |
| (c) Consider use of a flow diagram | na |
| Descriptive data | 14\* | (a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders | 6 |
| (b) Indicate number of participants with missing data for each variable of interest | na |
| (c) *Cohort study*—Summarise follow-up time (eg, average and total amount) | na |
| Outcome data | 15\* | *Cross-sectional study—*Report numbers of outcome events or summary measures |  |
| Main results | 16 | (*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included | 7-9 |
| (*b*) Report category boundaries when continuous variables were categorized | na |
| (*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period | na |
| Other analyses | 17 | Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses | na |
| **Discussion** | | |  |
| Key results | 18 | Summarise key results with reference to study objectives | 10-11 |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias | na |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence | 13 |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results | 13 |
| **Other information** | | |  |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based | 15 |

\*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.