Supplementary material for the article

**Recurrent Event Analysis for Time to Dropout of Newly-Enrolled MMT Participants in Guangdong, China: A Retrospective Study Using the Prentice-Williams-Peterson Model**

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Table S1 Univariable Cox proportional hazards regressionmodel analysis results of risk of dropout (*N*=1319)

| Characteristics | *HR* | *P* | *95%CI* |
| --- | --- | --- | --- |
| Education level |  |  |  |
| primary school or below | 1(ref) |
| middle school | 1.07 | 0.428 | 0.908, 1.256 |
| high school or above | 0.96 | 0.699 | 0.783, 1.179 |
| Marital status |  |  |  |
| married | 1(ref) |
| unmarried | 1.12 | 0.093 | 0.981, 1.283 |
| divorced or other | 1.22 | 0.077 | 0.979, 1.517 |
| Living status |  |  |  |
| live alone | 1(ref) |
| living with family/relatives/friends | 0.89 | 0.201 | 0.736, 1.066 |
| Gender |  |  |  |
| Male | 1(ref) |
| Female | 0.86 | 0.228 | 0.678, 1.097 |
| Inject drugs in the past 30 days |  |  |  |
| No | 1(ref) |
| Yes  | 1.22 | 0.011 | 1.047, 1.431 |
| Sex behavior |  |  |  |
| No | 1(ref) |
| Yes  | 0.99 | 0.945 | 0.856, 1.156 |
| Arrested in the past 3 months |  |  |  |
| No | 1(ref) |
| Yes  | 1.32 | 0.008 | 1.075, 1.613 |
| Family relationship |  |  |  |
| poor | 1(ref) |
| normal | 1.06 | 0.629 | 0.826, 1.373 |
| good | 0.85 | 0.238 | 0.652, 1.112 |
| Frequency of seeing drug-user (DU) friends |  |  |  |
|  Never | 1(ref) |
|  1-4 times | 1.06 | 0.535 | 0.881, 1.276 |
|  1-6 times per week | 1.37 | 0.005 | 1.101, 1.701 |
|  at least once per day | 1.52 | <0.001 | 1.305, 1.774 |
| Occupation |  |  |  |
| Unemployed  | 1(ref) |
| Employed | 1.01 | 0.931 | 0.874, 1.158 |
| The way to know about MMT |  |  |  |
| Introduced by drug partners | 1(ref) |
| Promotion by Community/Media | 0.76 | 0.002 | 0.634, 0.899 |
| Introduced by PSB | 0.81 | 0.060 | 0.643, 1.009 |
| other | 1.34 | 0.004 | 1.096, 1.628 |
| The way to get to clinic |  |  |  |
| By bus | 1(ref) |
| Drive by oneself | 1.25 | 0.078 | 0.976, 1.589 |
| Cycling | 0.93 | 0.707 | 0.618, 1.386 |
| walk | 1.18 | 0.164 | 0.935, 1.489 |
| other | 1.54 | <0.001 | 1.336, 1.777 |
| Mode of drug use in the past 6 months |  |  |  |
| Smoking or snorting | 1(ref) |
| Injection | 1.24 | 0.008 | 1.057, 1.459 |
| Mixed use or other | 0.93 | 0.587 | 0.708, 1.216 |
| Types of drugs |  |  |  |
| Heroin | 1(ref) |
| Other  | 0.77 | 0.366 | 0.435, 1.359 |
| Initial morphine urine test |  |  |  |
| Negative | 1(ref) |
| Positive | 2.45 | <0.001 | 2.146, 2.802 |
| HIV serostatus |  |  |  |
| Negative | 1(ref) |
| Positive | 1.26 | 0.011 | 1.053, 1.505 |
| HCV serostatus |  |  |  |
| Negative | 1(ref) |
| Positive | 1.13 | 0.252 | 0.919, 1.378 |
|  |  |  |  |
| Age started drug abuse | 0.96 | 0.145 | 0.917, 1.013 |
| Number of drug abuse per day in the past 30 days |  |  |  |
| ≤2 | 1(ref) |
| >2 | 1.31 | 0.306 | 0.784, 2.174 |
| Drug expenditure per day in the past 30 days |  |  |  |
| ≤150 | 1(ref) |
| >150 | 0.89 | 0.065 | 0.778, 1.008 |
| Commuting time (minutes) |  |  |  |
| <15 | 1(ref) |
| 15-30 | 1.10 | 0.331 | 0.906, 1.339 |
| ≥30 | 1.05 | 0.625 | 0.875, 1.249 |
| Average age started MMT |  |  |  |
| <30 | 1(ref) |
| 30-50 | 0.88 | 0.201 | 0.726, 1.070 |
| ≥50 | 0.47 | <0.001 | 0.319, 0.690 |
| The first methadone dosage (ml) |  |  |  |
|  <50 | 1(ref) |
|  ≥50 | 0.79 | 0.024 | 0.646, 0.970 |
| The last methadone dosage (ml) |  |  |  |
|  <50 | 1(ref) |
|  ≥50 | 0.76 | <0.001 | 0.670, 0.864 |
| Average dosage(ml) |  |  |  |
|  <60 | 1(ref) |
|  ≥60 | 0.46 | <0.001 | 0.371, 0.573 |

Table S2 Univariable Prentice-Williams-Peterson model with a total time scale analysis results of risk of recurrent dropout (*N*=1319)

| Characteristics | *HR* | *P* | *95%CI* |
| --- | --- | --- | --- |
| Education level |  |  |  |
| primary school or below | 1(ref) |
| middle school | 1.12 | 0.155 | 0.958, 1.305 |
| high school or above | 1.01 | 0.902 | 0.835, 1.226 |
| Marital status |  |  |  |
| married | 1(ref) |
| unmarried | 1.11 | 0.121 | 0.974, 1.255 |
| divorced or other | 1.30 | 0.006 | 1.081, 1.571 |
| Living status |  |  |  |
| live alone | 1(ref) |
| living with family/relatives/friends | 0.88 | 0.152 | 0.740, 1.048 |
| Gender |  |  |  |
| Male | 1(ref) |
| Female | 0.87 | 0.146 | 0.716, 1.051 |
| Inject drugs in the past 30 days |  |  |  |
| No | 1(ref) |
| Yes  | 1.24 | 0.003 | 1.073, 1.424 |
| Sex behavior |  |  |  |
| No | 1(ref) |
| Yes  | 1.02 | 0.789 | 0.885, 1.174 |
| Arrested in the past 3 months |  |  |  |
| No | 1(ref) |
| Yes  | 1.21 | 0.061 | 0.991, 1.482 |
| Family relationship |  |  |  |
| poor | 1(ref) |
| normal | 0.92 | 0.462 | 0.730, 1.154 |
| good | 0.82 | 0.109 | 0.645, 1.045 |
| Frequency of seeing drug-user (DU) friends |  |  |  |
|  Never | 1(ref) |
|  1-4 times | 1.01 | 0.892 | 0.854, 1.199 |
|  1-6 times per week | 1.22 | 0.042 | 1.007, 1.479 |
|  at least once per day | 1.41 | <0.001 | 1.215, 1.631 |
| Occupation |  |  |  |
| Unemployed  | 1(ref) |
| Employed | 1.04 | 0.567 | 0.908, 1.193 |
| The way to know about MMT |  |  |  |
| Introduced by drug partners | 1(ref) |
| Promotion by Community/Media | 0.82 | 0.022 | 0.692, 0.972 |
| Introduced by PSB | 0.84 | 0.121 | 0.671, 1.047 |
| other | 1.10 | 0.321 | 0.914, 1.317 |
| The way to get to clinic |  |  |  |
| By bus | 1(ref) |
| Drive by oneself | 1.12 | 0.306 | 0.904, 1.379 |
| Cycling | 0.84 | 0.312 | 0.595, 1.180 |
| walk | 1.17 | 0.160 | 0.940, 1.453 |
| other | 1.43 | <0.001 | 1.246, 1.635 |
| Mode of drug use in the past 6 months |  |  |  |
| Smoking or snorting | 1(ref) |
| Injection | 1.18 | 0.027 | 1.019, 1.370 |
| Mixed use or other | 0.88 | 0.330 | 0.684, 1.136 |
| Types of drugs |  |  |  |
| Heroin | 1(ref) |
| Other  | 0.85 | 0.556 | 0.495, 1.459 |
| Initial morphine urine test |  |  |  |
| Negative | 1(ref) |
| Positive | 2.23 | <0.001 | 1.970, 2.526 |
| HIV serostatus |  |  |  |
| Negative | 1(ref) |
| Positive | 1.17 | 0.067 | 0.989, 1.391 |
| HCV serostatus |  |  |  |
| Negative | 1(ref) |
| Positive | 1.01 | 0.956 | 0.825, 1.226 |
|  |  |  |  |
| Age started drug abuse | 0.97 | 0.122 | 0.922, 1.010 |
| Number of drug abuse per day in the past 30 days |  |  |  |
| ≤2 | 1(ref) |
| >2 | 1.23 | 0.375 | 0.775, 1.968 |
| Drug expenditure per day in the past 30 days |  |  |  |
| ≤150 | 1(ref) |
| >150 | 0.92 | 0.190 | 0.816, 1.041 |
| Commuting time (minutes) |  |  |  |
| <15 | 1(ref) |
| 15-30 | 1.11 | 0.247 | 0.928, 1.335 |
| ≥30 | 1.05 | 0.528 | 0.897, 1.236 |
| Average age started MMT |  |  |  |
| <30 | 1(ref) |
| 30-50 | 1.01 | 0.902 | 0.837, 1.224 |
| ≥50 | 0.55 | 0.002 | 0.385, 0.798 |
| The first methadone dosage (ml) |  |  |  |
|  <50 | 1(ref) |
|  ≥50 | 0.92 | 0.293 | 0.788, 1.075 |
| The last methadone dosage (ml) |  |  |  |
|  <50 | 1(ref) |
|  ≥50 | 0.74 | <0.001 | 0.657, 0.833 |
| Average dosage(ml) |  |  |  |
|  <60 | 1(ref) |
|  ≥60 | 0.38 | <0.001 | 0.305, 0.469 |