**Table 3 Multivariate logistic regression result of risk factors for development of Rifampicin resistance tuberculosis (RR-TB)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Rifampicin resistance**  | **Univariate** | **Multivariate** |
| **No** | **Yes** | **cOR (95% CI)** | **p-value** | **aOR (95% CI)** | **p-value** |
| **Gender** |  |  |  |  |  |  |
|  | Female | 197 (86.4%) | 31 (13.6%) | 1.4 (0.91, 2.21) | 0.125 | 1.6 (1.01, 2.54) | 0.047 |
|  | Male | 702 (90.0%) | 78 (10.0%) | 1 |  | 1 |  |
| **Age group (years)** |  |  |  |  |  |  |
|  | < 60 | 693 (87.9%) | 95 (12.1%) | 2.0 (1.13, 3.61) | 0.018 | 2.0 (1.12, 3.67) | 0.019 |
|  | ≥ 60 | 206 (93.6%) | 14 (6.4%) | 1 |  | 1 |  |
| **Residence place** |  |  |  |  |  |  |
|  | Rural | 265 (83.6%) | 52 (16.4%) | 2.2 (1.46, 3.26) | < 0.001 | 1.4 (0.94, 2.20) | 0.095 |
|  | Urban | 634 (91.8%) | 57 (8.2%) | 1 |  | 1 |  |
| **TB treatment History** |  |  |  |  |  |  |
|  | Retreatment  | 227 (81.7%) | 51 (18.3%) | 6.4 (2.29, 8.15) | < 0.001 | 5.7 (2.98, 11.05) | < 0.001 |
|  | On treatment  | 299 (86.9%) | 45 (13.1%) | 4.3 (3.43, 12.11) |  | 4.2 (2.12, 7.98) |  |
|  | Pre-treatment | 373 (96.6%) | 13 (3.4%) | 1 |  | 1 |  |

cOR Crude Odds Ratio, aOR Adjusted Odds Ratio