**Table 3:** Cox proportional hazard analysis with bivariable and multivariable model for socio demographic and clinical characteristics of HIV patients on ART in UOG, North West Ethiopia from Jan 1, 2012 to Dec 31, 2017 (n = 315).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Category** | **Treatment failure** | **CHR** | **95% CI** | **AHR**  | **95% CI** | **P value** |
| **Yes** | **No** |
| WHO clinical stage | 1 and 2 | 6 | 152 | 1 |  | 1 |  |  |
| 3 and 4 | 26 | 131 | 3.877 | 1.595-9.427 | 4.471 | 1.625-12.301 | 0.004 |
| BMI (kg/m2) | 18.5-24.9 | 17 | 244 | 1 |  | 1 |  |  |
| < 18.5 | 15 | 39 | 4.155 | 2.070-8.337 | 3.343 | 1.552-7.201 | 0.002 |
| ART drug toxicity | Yes | 12 | 55 | 2.846 | 1.363-5.942 | 2.470 | 1.091-5.594 | 0.030 |
| No | 20 | 228 | 1 |  | 1 |  |  |
| OIS | Yes | 18 | 54 | 3.348 | 1.661-6.748 | 1.715 | 0.699-4.207 | 0.283 |
| No | 14 | 229 | 1 |  | 1 |  |  |
| TB coinfection | Yes | 8 | 39 | 1.764 | 0.791-3.934 | 0.651 | 0.254-1.666 | 0.370 |
| No | 24 | 244 | 1 |  | 1 |  |  |
| ART regimen type | NVP | 8 | 91 | 2.330 | 1 039-5.229 | 0.533 | 0.235-1.210 | 0.133 |
| EFV | 24 | 192 | 1 |  | 1 |  |  |
| Adherence issue | Good | 14 | 235 | 1 |  | 1 |  |  |
| Poor and fair | 18 | 48 | 6. 55 | 3.240-13.261 | 6.106 | 2.543-14.661 | 0.001 |
| Viral load measuring time  | At 6 months | 3 | 24 | 1 |  | 1 |  |  |
| > 6 months | 29 | 259 | 2.604 | 0.778-8.714 | 4.576 | 1.261-16.612 | 0.021 |
| Educational status | Non-educated | 7 | 68 | 1 |  | 1 |  |  |
| Primary | 11 | 80 | 1.063 | 0.410-2.756 | 0.902 | 0.327-2.488 | 0.843 |
| Secondary | 11 | 83 | 1.224 | 0.474-3.161 | 0.283 | 0.089-0.897 | 0.032 |
| Higher | 3 | 52 | 0.432 | 0.1-1.7 | 0.3 | 0.076-1.186 | 0.086 |

CHR: Crude Hazard ratio; AHR: Adjusted Hazard Ratio; 95% CI: 95% Confidence Interval.