**Supplemental Digital Content 3**

**Table 1: Frequencies and Means of baseline study characteristics (raw data)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Raw data** | | | | **Imputed data** | | | |
| **Variable** | **GSP**  **(N=578)**  **N (%)** | **GHE**  **(N=562)**  **N (%)** | **Cluster-adjusted Chi-square or t-test** | **P-value** | **GSP**  **(N=3,468)**  **N (%)** | **GHE**  **(N=3,372)**  **N (%)** | **Cluster-adjusted Chi-square or t-test** | **P-value** |
| Age(Years)Mean (SD) | 38.85(10.44) | 38.06(11.50) | -1.21 | 0.225 | 38.85(10.43) | 38.06(11.49) | -0.58 | 0.56 |
| **Gender**  Female  Male | 317(54.84)  261(45.16) | 295(52.49)  267(47.51) | 0.63 | 0.426 | 1902(54.84)  1566(45.16) | 1770(52.59)  1602(47.51) | 0.41 | 0.52 |
| **Educational background**  ≤ Primary education  ≥ Secondary education | 503(87.02)  75(12.98) | 480(85.41)  82(14.59) | 0.63 | 0.429 | 3018(87.02)  450(12.98) | 2880(85.41)  492(14.59) | 0.27 | 0.60 |
| **Occupational status**  Not employed  Employed  Peasant farmer | 221(38.24)  49(8.48)  308(53.29) | 184(32.74)  64(11.39)  314(55.87) | 0.27 | 0.88 | 1326(38.24)  294(8.48)  1848(53.29) | 1104(32.74)  384(11.39)  1884(55.87) | 0.26 | 0.87 |
| **Relationship status**  Never married  Married  Separated or divorced  Widowed | 57(9.86)  422(73.01)  44(7.61)  55(9.52) | 94(16.73)  394(70.11)  43(7.65)  31(5.52) | 3.52 | 0.32 | 342(9.86)  2532(73.01)  264(7.61)  330(9.52) | 564(16.73)  2364(70.11)  258(7.65)  186(5.52) | 3.50 | 0.32 |
| **Major depression**  No  Yes  Missing | 59(10.21)  502(87.02)  17(2.94) | 476(84.70)  76(13.52)  10(1.76) | 4.42 | 0.11 | 368(10.61)  3100(89.39) | 463(13.73)  2909(86.27) | 0.33 | 0.560 |
| **Viral load**  (≥ 1000 viral copies/ml)  < 1000 viral copies/ml)  Missing | 38(6.57)  402(69.55)  138(23.88) | 32(5.69)  386(68.68)  144(25.62) | 0.74 | 0.69 | 414(11.94)  3054(88.06) | 420(12.46)  2952(87.54) | 0.04 | 0.837 |
| **Adherence rate to ART**  <95%  ≥ 95%  Missing | 140(24.22)  419(72.49)  19(3.29 | 95(16.90)  445(78.18)  22(3.91) | 9.39 | 0.009 | 913(26.33)  2555(73.67) | 637(18.89)  2735(81.11) | 1.68 | 0.19 |

**Table 2: Frequencies of study variables at 2, 6, 12, 18 and 24 months post-treatment using raw data**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Raw data** | | | | **Imputed data** | | | |
| **Variable** | **GSP**  **(N=578)**  **N (%)** | **GHE**  **(N=562)**  **N (%)** | **Cluster-adjusted Chi-square or t-test** | **P-value** | **GSP**  **(N=3468)**  **N (%)** | **GHE**  **(N=3372)**  **N (%)** | **Cluster-adjusted Chi-square or t-test** | **P-value** |
| **2 Months Post treatment** | | | | | | | | |
| **Major depression**  No  Yes  Missing | 527(91.18)  6(1.04)  45(7.79) | 472(83.99)  69(12.28)  21(3.74) | 64.46 | 0.000 | 3384(97.58)  84(2.42) | 2933(86.98)  439(13.02) | 3.73 | 0.053 |
| **6 months Post treatment** | | | | | | | | |
| **Major depression**  No  Yes  Missing | 535(92.56)  2(0.35)  41(7.09) | 334(59.43)  146(26.51)  79(14.06) | 201.44 | 0.000 | 3415(98.47)  53(1.53) | 2359(69.96)  1013(30.04) | 11.20 | 0.008 |
| **Adherence rate to ART**  <95%  ≥ 95%  Missing | 11(1.90)  526(91.00)  41(7.09) | 8(1.42)  473(84.16)  81(14.41) | 16.18 | 0.000 | 176(5.07)  3292(94.93) | 287(8.51)  3085(91.49) | 0.49 | 0.482 |
| **12 months Post treatment** | | | | | | | | |
| **Major depression**  No  Yes  Missing | 532(90.48)  0(0.00)  55(9.52)) | 254(45.2)  197(35.05)  111(19.75) | 308.85 | 0.000 | 3409(98.30)  59(1.70) | 1976(58.60)  1396(41.40) | 9.31 | 0.002 |
| **Viral load**  (≥ 1000 viral copies/ml)  < 1000 viral copies/ml)  Missing | 29(5.02)  486(84.08)  63(10.90) | 27(4.80)  416(74.02)  119(21.17) | 22.51 | 0.0000 | 379(10.93)  3089(89.07) | 536(15.90)  2836(84.10) | 1.87 | 0.170 |
| **Adherence rate to ART**  <95%  ≥ 95%  Missing | 11(1.90)  511(88.41)  56(9.69) | 32(5.69)  417(74.20)  113(20.11) | 38.78 | 0.000 | 208(6.00)  3260(94.00) | 502(14.89)  2870(85.11) | 4.88 | 0.027 |
| **18 months Post treatment** | | | | | | | | |
| **Major depression**  No  Yes  Missing | 546(94.46)  1(0.17)  31(5.36) | 368(65.66)  142(25.27)  51(9.07) | 177.95 | 0.000 | 3431(98.93)  37(1.07) | 2393(70.97)  979(29.03) | 9.52 | 0.002 |
| **Adherence rate to ART**  <95%  ≥ 95%  Missing | 3(0.52)  540(93.43)  35(6.06) | 61(10.85)  450(80.07)  51(9.07) | 63.50 | 0.000 | 116(3.34)  3352(96.66) | 550(16.31)  2822(83.69) | 6.13 | 0.013 |
| **24 months Post treatment** | | | | | | | | |
| **Major depression**  No  Yes  Missing | 535(92.56)  0(0.00)  23(7.44) | 303(64.59)  115(20.46)  84(14.95) | 160.98 | 0.000 | 3425(98.76)  43(1.24) | 2535(75.18)  837(24.82) | 5.81 | 0.016 |
| **Viral load**  (≥ 1000 viral copies/ml)  < 1000 viral copies/ml)  Missing | 4(0.69)  525(90.83)  49(8.48) | 11(1.96)  453((80.60)  98(17.44) | 24.68 | 0.000 | 155(4.47)  3313(95.53) | 361(10.71)  3011(89.29) | 8.23 | 0.004 |
| **Adherence rate to ART**  <95%  ≥ 95%  Missing | 3(0.52)  529(91.52)  46(7.96) | 25(4,45)  439(78.11)  98(17.44) | 44.21 | 0.000 | 144(4.15)  3324(95.85) | 415(12.31)  2957(87.69) | 4.21 | 0.040 |

**Table 3: Mean function scores at 2, 6, 12, 18 and 24 months post-treatment using raw and imputed data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Raw data** | | | | **Imputed data** | | | |
| **Function Scores** | **Mean(SD)** | **Mean difference (95% CI)** | **P-value** | **Function Scores** | **Mean (SD)** | **Mean difference (95% CI)** | **P-Value** |
| Baseline  GHE (N=555)  GSP (N=564) | 5.55(2.86)  4.40(2.83) | 1.15(0.82-1.48) | 0.000 | Baseline  GHE (N=3468)  GSP (N=3372) | 5.56(2.87)  4.41(2.83) | 1.14(1.01-1.28) | 0.000 |
| 2 months  GHE (N=544)  GSP (N=534) | 9.14(1.49)  9.53(1.28) | -0.38(-0.55- -0.22) | 0.000 | 2 months  GHE (N=3468)  GSP (N=3372) | 9.14(1.48)  9.51(1.28) | -0.38(-0.45- -0.31) | 0.000 |
| 6 months  GHE (N=478)  GSP (N=534) | 6.83(2.85)  9.84(0.76) | -3.01(-3.26- -2.76) | 0.000 | 6 months  GHE (N=3468)  GSP (N=3372) | 6.87(2.77)  9.83(0.87) | -3.01(-3.10- -2.90) | 0.000 |
| 12 months  GHE (N=451)  GSP (N=522) | 5.94(3.01)  9.88(0.71) | -3.95(-4.21- -3.67) | 0.000 | 12 months  GHE (N=3468)  GSP (N=3372) | 5.97(2.98)  9.90(0.89) | -3.94(-4.04- -3.83) | 0.000 |
| 18 months  GHE (N=509)  GSP (N=547) | 6.17(2.86)  9.87(0.74) | -3.70(-3.95- -3.45) | 0.000 | 18 months  GHE (N=3468)  GSP (N=3372) | 6.19(2.84)  9.88(0.83) | -3.67(-3.77- -3.57) | 0.000 |
| 24 months  GHE (N=479)  GSP (N=536) | 6.48(3.27)  9.99(0.22) | -3.50(-3.78- -3.22) | 0.000 | 24 months  GHE (N=3468)  GSP (N=3372) | 6.62(3.24)  9.99(0.50) | -3.40(-3.51- -3.29) | 0.000 |