**Supplemental Digital Content 1**

**Box 1: Group Support Psychotherapy Training**

Training Over a 4-month period (January to April 2016), Makerere University, in collaboration with the Ministry of Health, designed a GSP training program that consisted of both formal and informal training. This training was delivered using a training-of-trainers model in May and August 2016. Mental health specialists trained primary health center workers who, in turn, trained the LHWs. Formal training consisted of eight training modules delivered in a 5-day training workshop that employed active learning techniques including role plays, brainstorming sessions, and small group discussions. In brief, the first three modules included an overview of the training program, introduction to the GSP model, and an introduction to depression and HIV/AIDS were delivered on the first day. On the second and third days, modules on basic counselling skills and effective coping strategies were delivered, respectively. On the fourth day, participants received training in basic livelihood skills (enterprise selection, basic financial skills, and resource mobilization) required to overcome poverty. The last day of training focused on self-care strategies, post training assessments, and training workshop evaluation. Informal training consisted of conducting supervised pilot GSP sessions. Newly trained health workers were supervised by a pool of previously trained health workers who participated in the pilot randomized controlled trial10. The competencies targeted by the training and the health worker supervision checklist used by supervisors have been published here <http://www.researchprotocols.org/2019/1/e11560/>

**Box 2: Group HIV Education Training**

In May 2016, Makerere University, in collaboration with The AIDS Support Organization (TASO), designed a group HIV education training program that consisted of both formal and informal training. Between May and August 2016, the training-of-trainers model was used to deliver the training, whereby TASO HIV care providers trained primary health center workers who in turn trained the LHWs. Formal training consisted of five training modules delivered in a lecture format in a 2-day training workshop. In brief, on the first day, three modules 3 including an overview of the training program, introduction to depression and HIV/AIDS, HIV progression, and transmission were delivered. On the second day, modules on mother-to-child transmission and basic facts on ART were delivered. Informal training consisted of conducting supervised pilot group HIV education sessions.

**Table 1: Number of complete and missing observations per study variable**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Observations** | | | |
| **Variable** | **Complete** | **Missing** | **Imputed** | **Total** |
| Baseline viral load | 858 | 282 | 282 | 1140 |
| 12 month viral load | 958 | 182 | 182 | 1140 |
| 24 month viral load | 993 | 147 | 147 | 1140 |
| Baseline adherence rate | 1099 | 41 | 41 | 1140 |
| 6 month adherence rate | 1018 | 122 | 122 | 1140 |
| 12 month adherence | 971 | 169 | 169 | 1140 |
| 18 month adherence rate | 1054 | 86 | 86 | 1140 |
| 24 month adherence rate | 996 | 144 | 144 | 1140 |
| Baseline major depression | 1113 | 27 | 27 | 1140 |
| 2 month major depression | 1074 | 66 | 66 | 1140 |
| 6 month major depression | 1020 | 120 | 120 | 1140 |
| 12 month major depression | 974 | 166 | 166 | 1140 |
| 18 month major depression | 1058 | 82 | 82 | 1140 |
| 24 month major depression | 1013 | 127 | 127 | 1140 |
| Baseline function scores | 1119 | 21 | 21 | 1140 |
| 2 month function scores | 1078 | 62 | 62 | 1140 |
| 6 month function scores | 1012 | 128 | 128 | 1140 |
| 12 month function scores | 973 | 169 | 169 | 1140 |

**Table 2:**

**Comparison of baseline characteristics between study completers and non-completers 24 months after treatment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **24 month completers**  **N=1013** | **24 month**  **Non-completers**  **N=127** | **χ2 or**  **Mean Difference** | **P-Value** |
| Age(Mean, SD) | 38.38(10.86) | 39.12(11.92) | -0.744 | 0.47 |
| **No. of trauma events**  (Mean, SD) | **7.16(4.93)** | **6.05(4.75)** | **1.11** | **0.016** |
| **Gender**  Males  Females | **457(25.11)**  **556(54.89)** | **71(55.91)**  **56(44.09)** | **5.28** | **0.021** |
| Employment status  Unemployed  Employed  peasants | 367(36.23)  98(9.67)  548(54.10) | 38(29.92)  15(11.81)  74(58.27) | 2.14 | 0.342 |
| Marital status  Never married  Married or living with partner  Separated or divorced  Widowed | 132(13.03)  730(72.06)  76(7.50)  75(7.40) | 19(14.96)  86(67.72)  11(8.66)  11(8.66) | 1.05 | 0.789 |
| Education background  Primary or less  Secondary or above | 878(86.67)  135(13.33) | 105(82.68)  22(17.32) | 1.51 | 0.218 |
| Self-reporting questionnaire | 13.58(3.99) | 13.24(3.49) | 0.34 | 0.374 |
| Functioning score | 4.96(2.95) | 5.10(2.42) | -0.13 | 0.621 |
| **Social support score** | **43.37(19.97)** | **48.32(18.26)** | **-4.95** | **0.010** |
| **Self-esteem score** | **13.57(8.06)** | **15.58(7.76)** | **-2.01** | **0.010** |
| HIV related stigma | 21.87(5.29) | 20.91(5.21) | 0.96 | 0.063 |
| PTSD  No  Yes | 253(24.98)  760(75.02) | 36(28.35)  91(71.65) | 0.67 | 0.410 |
| **Alcohol consumption**  No  Yes | **717(70.78)**  **296(29.22)** | **76(59.84)**  **51(40.16)** | **6.37** | **0.012** |
| **Suicide risk**  No  Yes | **446(44.03)**  **567(55.97)** | **36(28.35)**  **91(71.65)** | **11.37** | **0.001** |
| **Viral load**  Detectable (>1000 copies/mL)  Undetectable(<1000copies/mL) | **299(29.52)**  **714(70.48)** | **53(41.73)**  **74(58.27)** | **7.89** | **0.005** |
| **Adherence to ART**  Adherence rate <95%  Adherence rate ≥95% | 210(20.73)  803(79.27) | 25(19.69)  102(80.31) | 0.07 | 0.784 |

**Table 3: Summary of All Adverse Events at 24 Months post-treatment**

|  |  |  |
| --- | --- | --- |
| **Adverse events** | **GSP** | **GHE** |
| Number of Participants with persistent suicide ideation | 0 | 0 |
| Number of Participants with persistent suicide risk | 5 | 15 |
| Number of Participants with increased suicide risk  (low risk to moderate risk) | 0 | 1 |
| Suicide attempts | 8 | 13 |
| Complete suicide | 2 | 2 |
| Number of Participants who died (not by suicide) | 17 | 8 |
| Number of Participants hospitalized | 20 | 15 |
| **Total** | **52** | **54** |
| **Participants with AEs by Severity** |  |  |
| Mild | 0 | 0 |
| Moderate | 0 | 17 |
| Serious | 52 | 37 |
| **Participants with AEs by Relatedness to Treatment** |  |  |
| Not related | 17 | 9 |
| Unlikely |  |  |
| Possibly related | 20 | 15 |
| Probably related |  |  |
| Related | 15 | 30 |

**Table 4: Group session attendance by intervention arm**

|  |  |  |
| --- | --- | --- |
| **Number of sessions attended** | **Group Support Psychotherapy N=578** N (%) | **Group HIV Education N=562** N (%) |
| **0** | 33(5.71 | 15(2.67) |
| **1** | 4(0.69) | 1(0.18) |
| **2** | 5(0.87) | 0(0) |
| **3** | 3(0.52) | 2(0.36) |
| **4** | 9(1.56) | 5(0.89) |
| **5** | 4(0.69) | 10(1.78) |
| **6** | 30(5.19) | 11(1.96) |
| **7** | 40(6.92) | 16(2.85) |
| **8** | 450(77.85) | 502(89.32) |