**Supplementary Table 1.** Correlation matrix among adaptive stress index (ASI) sub-scale items (n=2058)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Correlation coefficients | | | | | ASI item mean (95%CI) |
| ASI items | ASI-1: Safety/Security | ASI-2: Attachments | ASI-3: Justice | ASI-4: Roles/Identities | ASI-5: Existential Meaning |
| ASI-1: Safety/Security (12 items) | 1.00 |  |  |  |  | 16.9 (16.4 – 17.4) |
| ASI-2: Attachments (14 items) | 0.88\*\* | 1.00 |  |  |  | 16.6 (16.0 – 17.2) |
| ASI-3: Justice (13 items) | 0.82\*\* | 0.87\*\* | 1.00 |  |  | 15.7 (15.1 – 16.1) |
| ASI-4: Roles/Identities (11 items) | 0.89\*\* | 0.88\*\* | 0.89\*\* | 1.00 |  | 13.7 (13.2 – 14.2) |
| ASI-5: Existential Meaning (14 items) | 0.87\*\* | 0.88\*\* | 0.89\*\* | 0.914\* | 1.00 | 14.9 (14.3 – 15.4) |

\*\*All the correlation coefficients are significant at p<0.01.

**Supplementary Table 2.** Comparison of correlation coefficients(r) between TEs and PMLDs, between TEs and ASI, between TEs and CMDs, between PMLDs and ASI, between PMLDs and CMDs and between ASI and CMDs across three samples of Chin , Kachin , and Rohingya refugees living in Malaysia

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Correlated items\*\* | Chin Refugees (1):  r (95% CI) | Kachin Refugees (2):  r (95% CI) | Rohingya Refugees (3):  r (95% CI) | Difference across groups 1,2 and 3: p-values |
| Correlation between TEs and PMLDs | 0.50 (0.44 -0.55) **↓2** **↑3** | 0.63 (0.56 -0.69) **↑1,3** | 0.12 (0.06 -0.18) **↓ 1,2** | *χ2* – test, p<0.001 |
| Correlation between TEs and ASI | 0.58 (0.52-0.64) **↑3** | 0.68 (0.60-0.74) **↑,3** | 0.28 (0.21 -0.34) **↓ 1,2** | *χ2* – test, p<0.001 |
| Correlation between TEs and CMDs | 0.29 (0.22-0.35) **↓2** **↑3** | 0.52 (0.44-0.60) **↑1,3** | 0.15 (0.09 -0.21) **↓ 1,2** | *χ2* – test, p<0.001 |
| Correlation between PMLDs and ASI | 0.85 (0.82 -0.87) **↑3** | 0.88 (0.85 -0.91) **↑,3** | 0.50 (0.45 -0.55) **↓ 1,2** | *χ2* – test, p<0.001 |
| Correlation between PMLDs and CMDs | 0.47 (0.41 -0.52) **↓2** | 0.66 (0.59 -0.71) **↑1,3** | 0.45 (0.39 -0.49) **↓ 2** | *χ2* – test, p<0.001 |
| Correlation between ASI and CMDs | 0.59 (0.53 -0.64) **↑3** | 0.70 (0.62 -0.76) **↑3** | 0.37 (0.31 -0.43) **↓ 1,2** | *χ2* – test, p<0.001 |

\*\*All the correlation coefficients are significant at p<0.01; *χ2* – test applied to test the significant differences for correlation coefficients across groups 1, 2, and 3.

Abbreviations: TEs, Traumatic events; PMLDs, Post migration difficulties; ASI, Adaptive Stress Index; CMDs, Common mental disorders.

Fisher’s Z test for two independent sample was used to examine the significant differences of correlation coefficients between groups .

The symbol **↑** indicate significantly higher than the group mentioned in superscript e.g. **↑1,2** indicates mean or prevalence for group 3 is significantly higher than group 1 and 2 respectively;

The symbol **↓**indicate significantly lower than the group mentioned in superscript e.g. ↓ 2,3indicates mean or prevalence for group 1 is significantly lower than group 2 and 3 respectively.

**Supplementary Table 3.** Comparison of mean TEs, mean PMLDs, mean ASI and prevalence of common mental disorders (CMDs) across three samples of Chin, Kachin and Rohingya refugees living in Malaysia (n=2058)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Indicators | Chin Refugees (1) | Kachin Refugees (2) | Rohingya refugees (3) | Difference across groups 1,2 and 3: p-values |
| Number of total TEs : Mean (95%CI) | 7.7 (7.3 – 8.0) ) **↓ 2,3** | 10.6 (10.2 - 11.1) ) **↑1** | 11.1 (10.7 – 11.5) **↑1** | *F* – test, p<0.001 |
| Postmigration living difficulties: Mean (95%CI) | 7.4 (6.9 – 7.8) **↓3** | 8.7 (7.8 – 9.5) **↓3** | 13.5 (13.2 – 13.9) **↑1,2** | *F* – test, p<0.001 |
| Adaptive Stress Index: Mean (95%CI) | 32.1 (29.5 – 34.9) **↓ 3** | 35.54 (30.8 – 40.5 ) **↓3** | 128.9 (126.4 – 131.4 ) **↑1,2** | *F* – test, p<0.001 |
| Common mental disorder: Prevalence % (95%CI) | 29.6 (26.3 – 32.8)**↓3** | 37.0 (31.8 – 42.2) ) **↓3** | 80.9 (78.4 – 83.4) **↑1,2** | *χ2* – test, p<0.001 |
| *F* – test one way analysis of variance (ANOVA) applied to test the significant differences for mean TEs and mean PMLD across groups 1, 2, and 3;  Bonferroni post-hoc test applied to examine the significant differences for mean TEs, mean PMLDs and mean ASI between groups i.e. 1 vs. 2, 1 vs. 3; 2 vs. 3;  *χ2* – test used to test the significant differences for prevalence of CMD across groups 1, 2, and 3; and between groups i.e. 1 vs. 2, 1 vs. 3; 2 vs. 3;  The symbol **↑** indicate significantly higher than the group mentioned in superscript e.g. **↑1,2** indicates mean or prevalence for group 3 is significantly higher than group 1 and 2 respectively;  The symbol **↓**indicate significantly lower than the group mentioned in superscript e.g. ↓ 2,3indicates mean or prevalence for group 1 is significantly lower than group 2 and 3 respectively. | | | | |

**Supplementary Table 4.** Prevalence of common mental disorder (CMD) by sociodemographic characteristics of the pooled sample (n=2058) adjusted for gender.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | All Refugees | | Female | | Male | |
| Socio-demographic characteristics | Total No. | Prev. of CMD:  n (row%) | Total No. | Prev. of CMD:  n (row%) | Total No. | Prev. of CMD:  n (row%) |
| All | 2058 | 1126 (54.7) | 695 | 289 (41.6) | 1315 | 792 (60.2) |
| Gender |  |  |  |  |  |  |
| Female | 695 | 289 (41.6) |  | - |  |  |
| Male | 1315 | 792(60.2) |  |  | - |  |
| p-values from Chi square test |  | p<0.001 |  |  |  |  |
| Name of Refugee Community |  |  |  |  |  |  |
| Chin | 761 | 225 (29.6) | 340 | 101 (29.7) | 419 | 124 (29.6) |
| Kachin | 338 | 125(37.0) | 184 | 78 (42.4) | 153 | 46 (30.1) |
| Rohingya | 959 | 776 (80.9) | 171 | 110 (64.3) | 743 | 622 (83.7) |
| *p-values from Chi square test* |  | p<0.001 |  | p<0.001 |  | p<0.001 |
| Age group (in years) |  |  |  |  |  |  |
| Under 30 | 1070 | 633 (59.2) | 343 | 154 (44.9) | 725 | 479 (66.1) |
| 30- 49 | 829 | 381(46.0) | 298 | 107 (35.9) | 531 | 274 (51.6) |
| 50 and above | 93 | 61 (65.6) | 43 | 24 (55.8) | 49 | 36 (73.5) |
| *p-values from Chi square test* |  | *p<0.001* |  | p=0.011 |  | p<0.001 |
| Employment |  |  |  |  |  |  |
| Unemployed | 729 | 348 (47.7) | 411 | 175 (42.6) | 316 | 173 (54.7) |
| Employed | 1084 | 560 (51.7) | 240 | 82 (34.2) | 843 | 477 (56.6) |
| *p-values from Chi square test* |  | *p=0.101* |  | *p=0.034* |  | *p=0.575* |
| Educational attainment |  |  |  |  |  |  |
| Primary or less | 1230 | 753 (61.2) | 326 | 131 (40.2) | 903 | 621 (68.8) |
| Completed high school | 613 | 223 (36.4) | 254 | 79 (21.1) | 357 | 144 (40.3) |
| University/training | 103 | 61 (59.2) | 69 | 46 (66.7) | 34 | 15 (44.1) |
| *p-values from Chi square test* |  | *p<0.001* |  | *p<0.001* |  | *p<0.001* |
| Marital status |  |  |  |  |  |  |
| Single/unmarried | 568 | 385 (67.8) | 130 | 74 (56.9) | 438 | 311 (71.0) |
| Married/widowed/separated | 1216 | 567 (46.6) | 523 | 193 (36.9) | 690 | 373 (54.1) |
| *p-values from Chi square test* |  | *p<0.001* |  | *p<0.001* |  | *p<0.001* |
| Number of total TEs |  |  |  |  |  |  |
| 0 to 9 | 1046 | 422 (40.3) | 431 | 128 (29.7) | 575 | 256 (44.5) |
| 10 to 15 | 667 | 430(64.5) | 191 | 105 (55.0) | 471 | 320 (67.9) |
| 16 or more | 345 | 274 (79.4) | 73 | 56 (76.7) | 269 | 216 (80.3) |
| *p-values from Chi square test* |  | *p<0.001* |  | *p<0.001* |  | *p<0.001* |
| Number of PMLDs |  |  |  |  |  |  |
| 0 to 9 | 937 | 239 (25.5) | 408 | 83 (20.3) | 511 | 140 (27.4) |
| 10 to 15 | 548 | 404 (73.7) | 141 | 88 (62.4) | 404 | 313 (77.5) |
| 16 or more | 573 | 483 (84.3) | 146 | 118 (80.8) | 400 | 338 (84.8) |
| *p-values from Chi square test* |  | *p<0.001* |  | *p<0.001* |  | *p<0.001* |
| Adaptive Stress Index (score) |  |  |  |  |  |  |
| 0-49 | 886 | 245 (27.7) | 384 | 92 (24.0) | 469 | 122 (26.0) |
| 50-99 | 244 | 116 (47.5) | 103 | 46 (44.7) | 138 | 67 (48.6) |
| 100 and more | 928 | 765 (82.4) | 208 | 151 (72.6) | 708 | 603 (85.2) |
| *p-values from Chi square test* |  | *p<0.001* |  | *p<0.001* |  | *p<0.001* |

Note:  *p*-values derived from *Chi square (χ2)* test conducted to examine the significant variation of prevalence of CMD for each factor; p values represent the significance level within the group.