**Supplementary table 1 Pesticides ingested by the recruited participants by history**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Bangladesh** | | **Sri Lanka** | |
|  | **Pesticide** | **Number** | **Pesticide** | **Number** |
| **OP insecticides** | Malathion  Chlorpyrifos  Dimethoate  Phenthoate  Diazinon  Quinalphos | 21  20  15  6  5  3  (n=70) | Profenofos  Chlorpyrifos  Diazinon  Quinalphos  Unknown organophosphate | 10  5  4  2  9  (n=30) |
| **Pyrethroids** | Cypermethrin  Lambda cyhalothrin  Fenvalerate  Permethrin | 20  15  4  1  (n=41) |  |  |
| **OP & pyrethroid combinations** | Chlorpyrifos & cypermethrin  Profenofos & cypermethrin | 15  2  (n=17) |  |  |
| **Carbamates** | Carbofuran  Carbosulfan | 3  3  (n=6) | Carbofuran  Carbosulfan | 10  13  (n=23) |
| **Herbicides** | Glyphosate | 1  (n=1) | Glyphosate  MCPA  Propanil | 17  2  1  (n=20) |
| **Others** | Abermectins/emermectin  Conazoles  Zinc phosphide  Copper oxichloride | 8  6  2  1  (n=17) |  |  |

**Abbreviations:** IQR, interquartile range; MCPA, 2-methyl-4-chlorophenoxyacetic acid; OP, organophosphate insecticide; SD, standard deviation.

**Supplementary table 2. Comparison of followed up vs non-followed up participants**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **BANGLADESH** | | | | | | **SRI LANKA** | | | | | |
|  | **All**  **(n=150)** | **Followed up (n=46)** | **Not followed up (n=104)** | | **Comparison followed up participants vs not followed up participants** | | **All**  **(n=71)** | **Followed up (n=46)** | | **Not followed up (n-25)** | | **Comparison followed up participants vs not followed up participants** |
| ***Demographics*** |  |  |  | |  | |  |  | |  | |  |
| Female  (N) % | 58  (38.4%) | 20 (43.5%) | 38(36.6%) | | 0.446 | | 73 (37.0%) | 16 (34.7%) | | 10 (28.6%) | | 0.8827 |
| Age  median (IQR) | 22.0 (19.0-30.0) | 26.0 (20.0-36.5) | 22 (19-28) | | 0.026 (Mann Whitney U) | | 32.0  (23.0-45) | 30.5 (22.3-44.5) | | 30.5 (34.0-37.5) | | 0.221 |
| Intentional ingestion  (n) % | 116 (77.5%) | 32 (69.6%) | 84 (80.8%) | | 0.131 | | 73  (100%) | 46 (100%) | | 25 (100%) | | - |
| ***Anthropometry*** |  |  |  | |  | |  |  | |  | |  |
| BMI kg/m2  (mean, SD) | 20.0 (3.2) | 20.3 (4.88) | 19.6 (2.94) | | 0.296 | | 21.1 (5.68) | 20.8 (5.01) | | 22.9 (6.77) | | 0.274 |
| Waist (cm) mean (SD) | 71.6  (8.8) | 25.1 (4.86) | 24.6 (2.87) | | 0.452 | | 75.2 (9.20) | 73.3 (8.72) | | 76.4 (9.13) | | 0.454 |
| Upper arm (cm) mean (SD) | 24.9 (3.0) | 72.2 (14.2) | 70.5 (8.60) | | 0.392 | | 25.6 (3.34) | 25.4 (3.26) | | 25.8 (3.60) | | 0.704 |
| Mid thigh (cm)  mean (SD) | 39.3 (5.3) | 38.3 (7.31) | 39.3 (5.79) | | 0.413 | | 43.1 (7.25) | 43.4 (7.12) | | 42.8 (1.53) | | 0.745 |
| Waist hip ratio  Mean (SD) | 0.86 (0.07) | 0.88 (0.07) | 0.85 (0.06) | | 0.057 | | 0.89 (0.87) | 0.90 (0.28) | | 0.88 (0.16) | | 0.713 |
| ***Indices of poisoning severity*** | | |  |  | |  |  | |  | |  |  |  |
| Duration to presentation (hours)  median (IQR) | 4.0  (2.3-5.7) | 4.0 (2.0-4.0) | 4.0 (2.0-5.5) | | 0.402 | | 2.0  (2.0-3.0) | 2.0 (2.0-3.0) | | 2.0 (1.3-3.0) | | 0.771 |
| Duration of atropine treatment (days)  median (IQR) | 2.0  (0.5-3.8) | 3.0 (2.0-4.0) | 2.0 (0.50-3.0) | | 0.001 | | 2.0 (0.0-4.5) | 2.0 (0.0-48) | | 1.0 (0.0-4.8) | | 0.977 |
| Admission BuChE activity (U/L) median (IQR) | NK | NK | NK | | - | | 79.8 (21.2-170) | 112 (48.9-181) | | 102 (14.5-213) | | 0.182 |
| BuChE activity 8h post admission(U/L), median (IQR) | NK | NK | NK | | - | | 62.8 (18.2-200) | 112 (48.8-181) | | 103 (14.5-213) | | 0.129 |
| Duration to Baseline OGTT from date of ingestion (days) median (IQR) | 3.0  (2.0-5.0) | 4.5 (3.0-6.0) | 3.0 (2.0-5.0) | | 0.003 | | 10.0 (6.0-15.0) | 10.0 (8.0-15.0) | | 9.0 (5.0-14.0) | | 0.878 |
| Duration of admission (days) median (IQR) | 3.0 (2.0-5.0) | 4.5 (3.0-6.0) | 3.0 (2.0-5.0) | | 0.073 | |  |  | |  | |  |
| Plasma lactate on admission (mmol/L)  median (IQR) | NK | NK | NK | | - | | 1.70 (1.30-2.43) | 1.65 (1.30-2.20) | | 2.05 (1.10-2.57) | | 0.679 |
| Plasma lactate 8h after admission (mmol/L)  median (IQR) | NK | NK | NK | | - | | 1.60 (.125-2.10) | 1.60 (1.33-2.20) | | 1.65 (1.05-3.45) | | 0.199 |
| Heartrate on admission (min-1)mean (SD) | 84.3 (14.7) | 91.6 (15.1) | 81.5 (13.5) | | 0.001 | | NK |  | |  | | - |
| Systolic BP on admission (mmHg)  mean (SD) | 107 (13.6) | 113 (16.5) | 105 (11.4) | | 0.003 | | NK |  | |  | | - |
| ***Glucose homeostasis*** | |  |  | |  | |  |  | |  | |  |
| Fasting glucose (mmol/L)  mean (SD) | 4.69 (0.63) | 4.98 (0.84) | 4.56 (0.472) | | 0.002 | | 7.00 (5.40-8.20) | 4.92 (0.53) | | 5.15 (0.74) | | 0.122 |
| HbA1c (mmol/mol; %)  mean (SD) | 35 (4); 5.4 (0.6) | 36 (4); 5.4 (0.6) | 35 (3); 5.4 (0.5) | | 0.184 | | 36 (5); 5.4 (0.7) | 36 (6); 5.4 (0.8) | | 35 (4); 5.4 (0.6) | | 0.736 |
| Two-hour plasma glucose (mmol/L)  mean (SD) | 7.42 (2.25) | 9.81 (1.72) | 6.41 (1.60) | | <0.0001 | | 7.06 (2.49) | 7.07 (2.49) | | 7.42 (2.61) | | 0.570 |
| HOMA IR  median (IQR) | - | - | - | | - | | 0.77 (0.55-1.09) | 0.73 (0.45-0.96) | | 0.77 (0.50-1.17) | | 0.568 |
| AUC Glucose (mmolmin/L)  mean (SD) | - | - | - | | - | | 917 (210) | 925 (202) | | 906 (229) | | 0.728 |
| AUC C-peptide (nmolmin/l)  median (IQR) |  |  |  | |  | | 177 (118-254) | 182 (116-251) | | 158 (120-276) | | 0.840 |

**Abbreviations:** AUC, area under the curve; BMI, body mass index; BP, blood pressure; BuChE, Butyrylcholinesterase; HbA1c, glycosylated haemoglobin A1; HOMA IR, homeostatic modelling assessment of insulin resistance 2; IQR, interquartile range; OGTT, two hour oral glucose tolerance test; OP, organophosphorus insecticide; SD, standard deviation. P values are for independent samples t test (normally distributed data) or independent samples Mann Whitney U tests (non-normally distributed data).

**Supplementary table 3. Pearson’s correlations between baseline OGTT glucose variables and markers of illness severity**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Bangladesh | | Sri Lanka | | | |
|  | Fasted glucose | 2-hour glucose | Fasted glucose | 2-hour glucose | Glucose AUC | HOMA-IR |
| Duration of admission | 0.244 (p=0.003) | 0.215 (p=0.008) | 0.019 (p=0.876) | 0.097 (p=0.421) | 0.017 (p=0.885) | 0.071 (p=0.554) |
| Duration of atropine treatment | 0.233 (p=0.008) | 0.307 (p<0.001) | -0.123 (p=0.425) | 0.312 (p=0.039) | 0.308 (p=0.042) | 0.154 (p=0.348) |
| Admission HR | 0.210 (p=0.010) | 0.385 (p<0.001) |  |  |  |  |
| Admission SBP | 0.234 (p=0.005) | 0.287 (p<0.001) |  |  |  |  |
| BuChE on admission |  |  | -0.251 (p=0.041) | -0.291 (p=0.017) | -0.374 (p=0.002) | -0.329 (p=0.007) |
| BuChE after 8 hours |  |  | -0.279 (p=0.021) | -0.358 (p=0.003) | r = -0.441, (p<0.001) | -0.295 (p=0.015) |
| Lactate on admission |  |  | -0.014 (p=0.909) | 0.305, (p=0.010) | 0.260 (p=0.030) | 0.003 (p=0.980) |
| Lactate after 8 hours |  |  | -0.311 (p=0.009) | 0.264 (p=0.029) | 0.156 (p=0.201) | 0.100 (p=0.413) |

**Abbreviations:** AUC, area under the curve; BMI, body mass index; BP, blood pressure; BuChE, Butyrylcholinesterase; HOMA IR, homeostatic modelling assessment of insulin resistance 2; HR heart, rate; IQR, interquartile range; OGTT, two hour oral glucose tolerance test; OP, organophosphorus insecticide; SD, standard deviation.