

## Supplementary material

**Table S1. Demographic data of the study participants (n = 188)**

Characteristic	Overall N = 188 <sup>1</sup>	CH N = 69 <sup>1</sup>	CS N = 80 <sup>1</sup>	VP N = 39 <sup>1</sup>	p-value <sup>2</sup>
Sex					0.807
Female	112 (59.6%)	40 (58.0%)	47 (58.8%)	25 (64.1%)	
Male	76 (40.4%)	29 (42.0%)	33 (41.3%)	14 (35.9%)	
Age (years)	45 (32, 57)	50 (35, 59)	45 (32, 59)	37 (27, 44)	<b>0.008</b>
Age group					<b>0.037</b>
18-31	45 (23.9%)	11 (15.9%)	20 (25.0%)	14 (35.9%)	
32-43	46 (24.5%)	14 (20.3%)	18 (22.5%)	14 (35.9%)	
44-58	54 (28.7%)	25 (36.2%)	22 (27.5%)	7 (17.9%)	
59+	43 (22.9%)	19 (27.5%)	20 (25.0%)	4 (10.3%)	
Education					<b>0.035</b>
None/incomplete primary school	24 (12.9%)	8 (11.9%)	9 (11.3%)	7 (17.9%)	
Primary school	91 (48.9%)	25 (37.3%)	42 (52.5%)	24 (61.5%)	
High school/university	71 (38.2%)	34 (50.7%)	29 (36.3%)	8 (20.5%)	
Occupation					0.176
Homemaker/student	40 (21.5%)	11 (16.2%)	15 (18.8%)	14 (36.8%)	
Employed	81 (43.5%)	32 (47.1%)	35 (43.8%)	14 (36.8%)	
Unemployed/underemployed	27 (14.5%)	11 (16.2%)	10 (12.5%)	6 (15.8%)	
Retired/pensioner	38 (20.4%)	14 (20.6%)	20 (25.0%)	4 (10.5%)	

<sup>1</sup>n (%); Median (Q1, Q3)

<sup>2</sup>Pearson's Chi-squared test; Kruskal-Wallis rank sum test

**Table S2. Knowledge about dengue by neighborhood (n = 188)**

Characteristic	Overall N = 188 <sup>1</sup>	CH N = 69 <sup>1</sup>	CS N = 80 <sup>1</sup>	VP N = 39 <sup>1</sup>	p-value <sup>2</sup>
Is aware of dengue	185 (98.4%)	69 (100.0%)	80 (100.0%)	36 (92.3%)	<b>0.008</b>
Knows someone that has had dengue					
Knows someone with dengue	79 (42.7%)	47 (68.1%)	29 (36.3%)	3 (8.3%)	<b>&lt;0.001</b>
Someone from neighborhood	68 (36.8%)	45 (65.2%)	23 (28.8%)	0 (0.0%)	<b>&lt;0.001</b>
Someone from household	14 (7.6%)	11 (15.9%)	2 (2.5%)	1 (2.8%)	<b>0.006</b>
Had dengue themselves	4 (2.1%)	3 (4.3%)	1 (1.3%)	0 (0.0%)	0.427
Dengue symptoms					
Fever	131 (70.8%)	56 (81.2%)	56 (70.0%)	19 (52.8%)	<b>0.010</b>
Headache	45 (24.3%)	20 (29.0%)	17 (21.3%)	8 (22.2%)	0.519
Myalgia	42 (22.7%)	22 (31.9%)	15 (18.8%)	5 (13.9%)	0.060
Diarrhea	11 (5.9%)	3 (4.3%)	4 (5.0%)	4 (11.1%)	0.361
Nausea/vomiting	38 (20.5%)	15 (21.7%)	19 (23.8%)	4 (11.1%)	0.283
Malaise	29 (15.7%)	13 (18.8%)	15 (18.8%)	1 (2.8%)	0.060
Fatigue	34 (18.4%)	21 (30.4%)	11 (13.8%)	2 (5.6%)	<b>0.003</b>
Skin rash	10 (5.4%)	5 (7.2%)	3 (3.8%)	2 (5.6%)	0.640
Hemorrhage	2 (1.1%)	1 (1.4%)	1 (1.3%)	0 (0.0%)	>0.999
Influenza-like symptoms	18 (9.7%)	10 (14.5%)	7 (8.8%)	1 (2.8%)	0.168
Dizziness	14 (7.6%)	5 (7.2%)	8 (10.0%)	1 (2.8%)	0.478
Retro-orbital pain	4 (2.2%)	1 (1.4%)	2 (2.5%)	1 (2.8%)	>0.999
None	30 (16.2%)	5 (7.2%)	14 (17.5%)	11 (30.6%)	<b>0.008</b>
Ways of transmission					
Mosquito bites	163 (88.1%)	58 (84.1%)	76 (95.0%)	29 (80.6%)	<b>0.027</b>
Water containers	12 (6.5%)	1 (1.4%)	8 (10.0%)	3 (8.3%)	0.069
Travel to endemic areas	1 (0.5%)	0 (0.0%)	1 (1.3%)	0 (0.0%)	>0.999
Doesn't know any way of transmission	20 (10.8%)	10 (14.5%)	3 (3.8%)	7 (19.4%)	<b>0.012</b>

<sup>1</sup>n (%)<sup>2</sup>Fisher's exact test; Pearson's Chi-squared test

**Table S3. Perceptions of the risk of dengue compared to leptospirosis among participants (n = 188)**

Characteristic	Overall N = 188 <sup>1</sup>	CH N = 69 <sup>1</sup>	CS N = 80 <sup>1</sup>	VP N = 39 <sup>1</sup>	p-value <sup>2</sup>
Most fear of contagion					0.6
Leptospirosis	73 (39.5%)	29 (42.0%)	33 (41.3%)	11 (30.6%)	
Both	60 (32.4%)	18 (26.1%)	27 (33.8%)	15 (41.7%)	
Dengue	28 (15.1%)	13 (18.8%)	11 (13.8%)	4 (11.1%)	
None/not sure	24 (13.0%)	9 (13.0%)	9 (11.3%)	6 (16.7%)	
More risk of infection					<b>&lt;0.001</b>
Dengue	98 (53.0%)	45 (65.2%)	44 (55.0%)	9 (25.0%)	
Both	25 (13.5%)	9 (13.0%)	12 (15.0%)	4 (11.1%)	
None/not sure	19 (10.3%)	10 (14.5%)	6 (7.5%)	3 (8.3%)	
Leptospirosis	43 (23.2%)	5 (7.2%)	18 (22.5%)	20 (55.6%)	
Higher prevalence					<b>&lt;0.001</b>
Dengue	93 (50.3%)	50 (72.5%)	34 (42.5%)	9 (25.0%)	
Both	21 (11.4%)	5 (7.2%)	11 (13.8%)	5 (13.9%)	
Leptospirosis	43 (23.2%)	7 (10.1%)	19 (23.8%)	17 (47.2%)	
None/not sure	28 (15.1%)	7 (10.1%)	16 (20.0%)	5 (13.9%)	
More publicity					<b>0.003</b>
Both	26 (14.1%)	5 (7.2%)	15 (18.8%)	6 (16.7%)	
Dengue	115 (62.2%)	53 (76.8%)	48 (60.0%)	14 (38.9%)	
Leptospirosis	14 (7.6%)	2 (2.9%)	5 (6.3%)	7 (19.4%)	
None/not sure	30 (16.2%)	9 (13.0%)	12 (15.0%)	9 (25.0%)	
Febrile illness symptoms (6 months)					
Any febrile illness symptom	130 (69.1%)	46 (66.7%)	58 (72.5%)	26 (66.7%)	0.7
Headache	76 (40.4%)	23 (33.3%)	36 (45.0%)	17 (43.6%)	0.3
Myalgia	71 (37.8%)	26 (37.7%)	30 (37.5%)	15 (38.5%)	>0.9
Diarrhea/vomiting	28 (14.9%)	8 (11.6%)	13 (16.3%)	7 (17.9%)	0.6
Skin rash	20 (10.6%)	8 (11.6%)	10 (12.5%)	2 (5.1%)	0.5
Malaise	57 (30.3%)	18 (26.1%)	28 (35.0%)	11 (28.2%)	0.5
Fever	19 (10.1%)	5 (7.2%)	8 (10.0%)	6 (15.4%)	0.4
Action taken					0.3
Sought medical care	61 (48.4%)	23 (52.3%)	30 (52.6%)	8 (32.0%)	
Self-medicated	32 (25.4%)	9 (20.5%)	14 (24.6%)	9 (36.0%)	
Nothing	31 (24.6%)	10 (22.7%)	13 (22.8%)	8 (32.0%)	
Other	2 (1.6%)	2 (4.5%)	0 (0.0%)	0 (0.0%)	
Issues in the neighborhood	172 (91.5%)	56 (81.2%)	78 (97.5%)	38 (97.4%)	<b>&lt;0.001</b>
Dengue as an issue in the neighborhood	8 (4.3%)	3 (4.3%)	3 (3.8%)	2 (5.1%)	>0.9
Neighborhood improvements	76 (40.4%)	51 (73.9%)	19 (23.8%)	6 (15.4%)	<b>&lt;0.001</b>

<sup>1</sup>n (%)

<sup>2</sup>Fisher's Exact Test for Count Data with simulated p-value (based on 2000 replicates); Pearson's Chi-squared test

**Table S4. Preventive practices against dengue among the study participants (n = 188)**

Characteristic	Overall N = 188 <sup>1</sup>	CH N = 69 <sup>1</sup>	CS N = 80 <sup>1</sup>	VP N = 39 <sup>1</sup>	p-value <sup>2</sup>
Avoids storage of environmental water					
Storing water containers	87 (46.3%)	42 (60.9%)	26 (32.5%)	19 (48.7%)	<b>0.002</b>
Using water from rivers/lagoons	167 (88.8%)	65 (94.2%)	70 (87.5%)	32 (82.1%)	0.15
Using rainwater	174 (92.6%)	68 (98.6%)	67 (83.8%)	39 (100.0%)	<b>&lt;0.001</b>
Garbage disposal					
Disposes in the garbage truck	134 (71.3%)	64 (92.8%)	63 (78.8%)	7 (17.9%)	<b>&lt;0.001</b>
Avoids burning	149 (79.3%)	68 (98.6%)	65 (81.3%)	16 (41.0%)	<b>&lt;0.001</b>
Avoids storing in the backyard	167 (88.8%)	69 (100.0%)	71 (88.8%)	27 (69.2%)	<b>&lt;0.001</b>
Avoids throwing into water bodies	185 (98.4%)	69 (100.0%)	79 (98.8%)	37 (94.9%)	0.2

<sup>1</sup>n (%)<sup>2</sup>Pearson's Chi-squared test; Fisher's Exact Test for Count Data with simulated p-value (based on 2000 replicates)

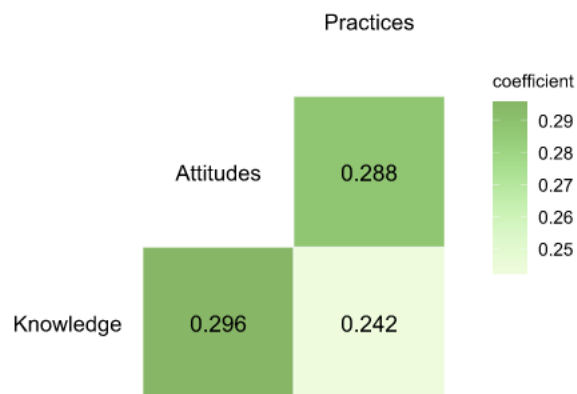
**Table S5. KAP scores by neighborhood (n = 188)**

Characteristic	Overall N = 188 <sup>1</sup>	CH N = 69 <sup>1</sup>	CS N = 80 <sup>1</sup>	VP N = 39 <sup>1</sup>	p-value <sup>2</sup>
Knowledge score	4.00 (2.50, 4.00)	4.00 (3.00, 5.00)	4.00 (3.00, 4.00)	2.00 (2.00, 4.00)	<b>&lt;0.001</b>
Attitudes score	2.00 (1.00, 3.00)	3.00 (2.00, 3.00)	2.00 (1.00, 3.00)	1.00 (0.00, 1.00)	<b>&lt;0.001</b>
Practices score	3.00 (2.00, 3.00)	3.00 (3.00, 3.00)	3.00 (2.00, 3.00)	2.00 (1.00, 2.00)	<b>&lt;0.001</b>

<sup>1</sup>Median (Q1, Q3)

<sup>2</sup>Kruskal-Wallis rank sum test

**Figure S6. Kendall's correlation among KAP scores.**



**Table S7. ELISA positivity and DENV-seroprevalence by neighborhood (n = 188)**

Site	Total	Positives			Seroprevalence	
		Test	True	False	Apparent	True
CH	69	17	13 (7-20)	4 (1-8)	24.6% (16.0-36.0)	19.8% (10.1-32.5)
CS	80	8	2 (-0-6)	5 (1-10)	10.0% (5.2-18.5)	3.4% (-2.1-12.9)
VP	39	6	3 (1-7)	2 (-0-6)	15.4% (7.2-29.7)	9.4% (0.3-25.5)
<b>Total</b>	188	31	19 (12-28)	12 (6-19)	16.5% (11.9-22.5)	10.7% (5.5-17.4)

**Table S8. Univariate logistic regressions**

Characteristic	N	OR	95% CI	p-value
Sex	174			
Female		—	—	
Male		1.44	0.64, 3.22	0.4
Age (years)	174	1.02	1.00, 1.04	0.091
Age group	174			
18-31		—	—	
32-43		1.42	0.38, 5.95	0.6
44-58		2.61	0.81, 10.1	0.13
59+		2.18	0.63, 8.80	0.2
Education	174			
None/incomplete primary school		—	—	
Primary school		0.62	0.19, 2.46	0.5
High school/university		1.12	0.35, 4.37	0.9
Occupation	174			
Homemaker/student		—	—	
Employed		1.43	0.50, 4.72	0.5
Unemployed/underemployed		0.82	0.15, 3.70	0.8
Retired/pensioner		1.20	0.33, 4.57	0.8
Street type	174			
Paved/semi-paved		—	—	
Dirt		1.34	0.44, 3.88	0.6
Sand		0.29	0.11, 0.72	<b>0.009</b>
Roadside channels/ditches	174	0.47	0.16, 1.15	0.12
Proximity to roadside channels/ditches	174			
Over 50m		—	—	
Less than 50m		0.51	0.18, 1.27	0.2
Dumpyards	174	0.70	0.31, 1.56	0.4
Proximity to dumpyards	174			
Less than 50m		—	—	
Over 50m		1.25	0.56, 2.80	0.6
Vacant lots	174	0.30	0.13, 0.67	<b>0.004</b>
Proximity to vacant lots	174			
Less than 50m		—	—	
Over 50m		5.59	2.17, 17.3	<b>&lt;0.001</b>
Water bodies	174	0.64	0.26, 1.46	0.3
Proximity to water bodies	174			
Over 50m		—	—	
Less than 50m		0.66	0.27, 1.50	0.3
Source of drinking water	174			
Water pipes		—	—	
Tank truck/other		0.34	0.13, 0.81	<b>0.021</b>
Permeable house floor	174	2.07	0.37, 38.8	0.5
Impermeable house roof	174	0.67	0.22, 2.50	0.5
History of floodings	174	1.16	0.48, 3.12	0.8
Floodings in the past 30 days	174	0.75	0.29, 1.75	0.5
Knows someone with dengue	174	1.79	0.81, 4.07	0.2
Knows any symptom	174	0.97	0.61, 1.57	>0.9
Any way of transmission	174	3.97	0.77, 72.9	0.2
Any febrile illness symptom	174	0.41	0.18, 0.93	<b>0.031</b>
Storing water containers	174	2.62	1.16, 6.23	<b>0.024</b>
Disposes in the garbage truck	174	1.56	0.63, 4.48	0.4
Knowledge score	174	1.16	0.83, 1.66	0.4
Attitudes score	174	1.10	0.80, 1.51	0.6
Practices score	174	1.71	0.90, 3.78	0.14

Abbreviations: CI = Confidence Interval, OR = Odds Ratio