

Supplementary Materials: Low Levels of Knowledge, Attitudes and Preventive Practices on Leptospirosis among a Rural Community in Hulu Langat District, Selangor, Malaysia

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Table S1. Socio-demographic characteristics of members of a rural community in this study.

Variables	n	%
Age (in years)	-	-
≥34	219	49.3
<34	225	50.7
Gender	-	-
Male	223	50.2
Female	221	49.8
Ethnicity	-	-
Malay	369	83.1
Chinese	13	2.9
Indian	30	6.8
Others	32	7.2
Marital Status	-	-
Married	290	65.3
Unmarried	154	34.7
Number of Children	-	-
No children	30	10.3
1	46	15.9
2	69	23.8
3	58	20.0
4	47	16.2
5	20	6.9
6	11	3.8
7	4	1.4
8	4	1.4
9	1	0.3
Type of Education	-	-
Formal education	430	96.8
Non-formal education	14	3.2
Working Status	-	-
Employed	278	62.6
Unemployed	166	37.4
Monthly Income (Malaysian Ringgit)	-	-
<RM1500	121	43.5
≥RM1500	157	56.5

Table S2. Sources from which members of a rural community obtained the information on leptospirosis.

Item	Frequency	%
Have heard of rat-urine disease	388	87.4
Television/Radio	293	75.5
Newspaper	198	51.0
Doctor	69	17.8
Poster/Pamphlet	61	15.7
Magazine	60	15.5
Others	21	5.4

Table S3. Knowledge level of leptospirosis in relation to socio-demographic variables.

Variables	Knowledge Level		n (%)	χ^2	p	Prevalence Ratio (CI) [#]
	Good (%)	Poor (%)				
Gender	-	-	-	-	-	-
Male	91 (40.8)	132 (59.2)	223 (50.2)	0.893	0.345	1.081 (0.919–1.271)
Female	100 (45.3)	121 (54.7)	221 (49.8)	-	-	-
Age (in years)	-	-	-	-	-	-
<34	99 (45.2)	120 (54.8)	219 (49.3)	0.844	0.844	1.106 (0.892–1.370)
≥34	92 (40.9)	133 (59.1)	225 (50.7)	-	-	-
Ethnicity	-	-	-	-	-	-
Malay	172 (46.6)	197 (53.4)	369 (83.1)	11.514	0.001 *	1.840 (1.229–2.755)
Non-Malay	19 (25.3)	56 (74.7)	75 (16.9)	-	-	-
Income (RM) [†]	-	-	-	-	-	-
<1500	113 (41.2)	161 (58.8)	274 (61.7)	0.922	0.337	1.086 (0.916–1.287)
≥1500	78 (45.9)	92 (54.1)	170 (38.3)	-	-	-
Education type	-	-	-	-	-	-
Formal	184 (42.9)	244 (57.1)	428 (96.4)	0.004	0.952	0.987 (0.636–1.532)
Non-formal	7 (43.7)	9 (56.3)	16 (3.6)	-	-	-

* Significant at $p < 0.05$; [†] Malaysian Ringgit; [#] CI = confidence interval.

Table S4. Practices of rural communities relating to prevention of leptospirosis and its socio-demographic variables.

Variables	Practices Level		n (%)	χ^2	p	Prevalence Ratio (CI) [#]
	Good (%)	Unacceptable (%)				
Gender	-	-	-	-	-	-
Male	67 (30)	156 (70)	223 (50.2)	0.138	0.710	1.024 (0.904–1.159)
Female	70 (31.7)	151 (68.3)	221 (49.8)	-	-	-
Age (in years)	-	-	-	-	-	-
<34	69 (31.5)	150 (68.5)	219 (49.3)	0.086	0.770	1.043 (0.789–1.377)
≥34	68 (30.2)	157 (69.8)	225 (50.7)	-	-	-
Ethnicity	-	-	-	-	-	-
Malay	114 (30.9)	255 (69.1)	369 (83.1)	0.002	0.969	1.007 (0.694–1.463)
Non-Malay	23 (30.7)	52 (69.3)	75 (16.9)	-	-	-
Income (RM) [†]	-	-	-	-	-	-
<1500	71 (25.9)	203 (74.1)	274 (61.7)	8.197	0.004 *	1.211 (1.054–1.391)
≥1500	66 (38.8)	104 (61.2)	170 (38.3)	-	-	-
Education type	-	-	-	-	-	-
Formal	132 (30.8)	296 (69.2)	428 (96.4)	0.001	1.000	0.994 (0.710–1.392)
Non-formal	5 (31.3)	11 (68.7)	16 (3.6)	-	-	-

* Significant at $p < 0.05$; [†] Malaysian Ringgit; [#] CI = confidence interval.

Table S5. Multiple logistic regression predicting the knowledge level on leptospirosis.

Variable	β	p Value	Adjusted Odds Ratio	95% CI
Constant		0.017	2.247	-
Ethnicity				
Malay	-0.945	0.001 *	0.389	0.222–0.680
Non-Malay				

Notes: Method = Enter; $R^2 = 36.0\%$; Overall percentage = 57.0%; (*)—Significant $p < 0.05$.

Table S6. Multiple logistic regression predicting the practices level on leptospirosis.

Variable	β	p Value	Adjusted Odds Ratio	95% CI
Constant		<0.001	0.193	-
Income (RM) [†]				
<1500	0.596	0.004 *	1.814	1.204–2.734
≥1500				

Notes: Method = Enter; $R^2 = 25.0\%$; Overall percentage = 69.1%; (*)—Significant $p < 0.05$; [†] Malaysian Ringgit.

Table S7. Association between preventive practices level and knowledge level and attitude of the rural communities related to leptospirosis.

Variables	Practices Level (%)		n (%)	χ^2	p	Prevalence Ratio (CI) [#]
	Good (%)	Unacceptable (%)				
Knowledge Level						
Good	71 (37.2)	120 (62.8)	191 (43.0)	6.269	0.012 *	0.702 (0.532–0.926)
Poor	66 (26.1)	187 (73.9)	253 (57.0)			
Attitude Level						
Acceptable	115 (41.2)	164 (58.8)	279 (62.8)	37.789	<0.001 *	0.323 (0.214–0.489)
Unacceptable	22 (13.3)	143 (86.7)	165 (37.2)			

* Significant at $p < 0.05$; [#] CI = confidence interval.

Table S8. Multiple logistic regression of knowledge and attitude predicting the practices level on leptospirosis.

Variable	β	p Value	Adjusted Odds Ratio	95% CI
Constant		<0.001	0.021	-
Knowledge Level				
Good	0.371	0.087	1.449	0.948–2.215
Poor				
Attitude Level				
Acceptable	1.472	<0.001 *	4.357	2.613–7.264
Unacceptable				

Notes: Method = Enter; $R^2 = 13.3\%$; Overall percentage = 69.1%; (*)—Significant $p < 0.05$.

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