

Supplemental Table 1

Abdurafi Metema areas of northwest Ethiopia to 12 core questions on their knowledge of kala azar and its vector (June–October 2017)

Variable	Frequency	%
Overall median (IQR)—58.3% (33.3%, 75.0%)		
1. Knowledge of VL disease (<i>N</i> = 403)		
Yes	238	59.1
No	165	40.9
2. Knowledge of VL symptoms (<i>N</i> = 403)		
At least one symptom	190	47.1
Do not know	213	52.9
3. Knowledge of VL consequences (<i>N</i> = 403)		
At least one	236	58.6
Do not know	167	41.4
4. Knowledge of places where VL was found (<i>N</i> = 403)		
Tell correct places	183	45.4
Tell wrong places	220	54.6
5. Knowledge of how people get VL (<i>N</i> = 403)		
Insect bite	102	25.3
Not correct	301	74.7
6. Knowledge of VL vector (<i>N</i> = 403)		
Yes	47	11.7
No	356	88.3
7. Know to describe sand fly (<i>N</i> = 403)		
Correctly describe	47	11.7
Wrongly describe	356	88.3
8. Identify sand fly in pictures (<i>N</i> = 403)		
Correctly shown	36	8.9
Wrongly shown	367	91.1
9. Know places where sand fly bites (<i>N</i> = 403)		
Correct places	380	94.3
Wrong places	23	5.7
10. Know when sand fly bites (<i>N</i> = 403)		
Evening/nighttime	396	98.3
Daytime	7	1.7
11. Know seasons of sand fly bites (<i>N</i> = 403)		
Rainy season	101	25.1
Dry season	302	74.9
12. Know sand fly protective measures (<i>N</i> = 403)		
Know	283	70.2
Do not know	120	29.8

VL = visceral leishmaniasis.

Supplemental Table 2

Responses of nine selected practice questions of seasonal/migrant workers in agricultural farms in northwest Ethiopia, 2017

Variable	Frequency	%
Median (IQR)—22.2% (22.2–33.3%)		
1. Use protective measures (<i>N</i> = 403)		
Poor	151	37.5
Good	252	62.5
2. Use of local protective measures (<i>N</i> = 403)		
No	346	85.9
Yes	57	14.1
3. ITN utilization (<i>N</i> = 403)		
No	346	85.9
Yes	57	14.1
4. Always use ITN (<i>N</i> = 403)		
No	359	89.1
Yes	44	10.9
5. Proper clothing (<i>N</i> = 403)		
No	264	65.5
Yes	139	34.5
6. Commercial repellents (<i>N</i> = 403)		
No	280	69.5
Yes	123	30.5
7. Sleeping inside shelter (<i>N</i> = 403)		
No	280	69.5
Yes	123	30.5
8. Spraying (<i>N</i> = 403)		
No	387	96.0
Yes	16	4.0
9. Sleeping near animals (<i>N</i> = 403)		
No	372	92.5
Yes	31	7.7

ITN = insecticide-treated net.

Supplemental Table 3

Bivariate analysis of factors associated with knowledge of seasonal workers ($n = 403$) on kala azar disease and sand fly bite in lowlands of northwest Ethiopia (June–November 2017)

Variable	Level of knowledge		Crude odds ratio, 95% CI	P-value
	High/moderate	Low		
Age of participants (years)				0.13
≤ 30	125	216	1	
> 30	29	33	1.5 (0.9, 2.6)	
Educational status				0.001
No formal education	47	116	1	
Formal education	107	129	2.0 (1.3, 3.1)	
Frequency of visiting this area				0.007
1–4 times	97	190	1	
More than 4 times	55	59	1.8 (1.2, 2.8)	
Weeks stayed in this area				0.11
For at least 3 weeks	88	163	1	
More than 3 weeks	65	86	1.4 (0.9, 2.1)	
Attending health education on visceral leishmaniasis delivered every year during weeding and harvesting seasons				0.000
Yes	44	7	5.2 (2.3, 12.2)	
No	91	109	1	
Working nighttime				0.79
Yes	127	202	1.1 (0.6, 1.8)	
No	27	46	1	
Average daily income (Ethiopian birr)				0.001
≤ 116	116	149	2.0 (1.3, 3.2)	
> 116	100	38	1	
Shelter				0.82
Yes	71	111	1.0 (0.7, 1.6)	
No	83	136	1	

Supplemental Table 4

Bivariate analysis of factors associated with fair/good practice of sand fly bites and kala azar protective measures among seasonal/migrant workers in lowland agricultural farms of Abdurafi and Metemma areas of northwest Ethiopia ($n = 403$) from June to November 2017

Variable	Level of practice		Crude odds ratio, 95% CI	P-value
	Fair/good practice	Poor practice		
Age of participants (years)				
≤ 30	18	323	1.7 (0.4, 7.4)	0.49
> 30	2	60	1	
Educational status				
No formal education	5	158	1	0.15
Formal education	15	221	2.15 (0.76, 6.02)	
Frequency of visiting the area				
1–4 times	11	276	1	0.18
More than 4 times	8	106	1.89 (0.74, 4.84)	
Number of weeks in the area				
At least 3 weeks	8	243	1	0.068
More than 3 weeks	11	140	2.39 (0.94, 6.07)	
Attending health education on visceral leishmaniasis delivered every year during weeding and harvesting seasons				
Yes	5	46	3.51 (1.03, 12.02)	0.045
No	6	194	1	
Average daily salary (Ethiopian birr)				
< 100	11	181	1	0.293
100–150	3	119	0.42 (0.11, 1.52)	
> 150	6	83	1.19 (0.43, 3.33)	
Working nighttime				
Yes	16	313	0.9 (0.3, 2.7)	0.827
No	4	69	1	