THE LANCET Neurology

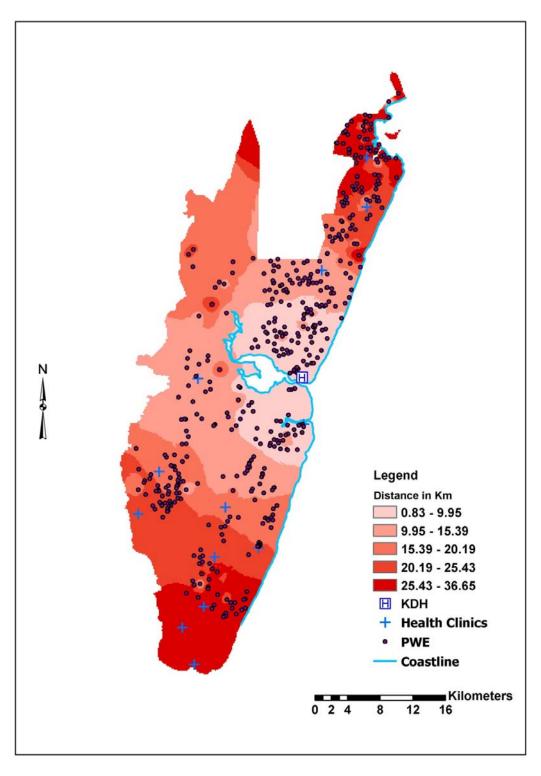
Supplementary webappendix

This webappendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Mbuba CK, Ngugi AK, Fegan G, et al. Risk factors associated with the epilepsy treatment gap in Kilifi, Kenya: a cross-sectional study. *Lancet Neurol* 2012; published online July 6. http://dx.doi.org/10.1016/S1474-4422(12)70155-2.

Figure: Distances to health facility used by people with epilepsy to seek biomedical treatment

Euclidian distance to the health facility where the person with epilepsy (PWE) sought treatment (n=499). Background shading represents quintiles of the distance to Kilifi District Hospital (KDH), the health facility used by 79% of people with epilepsy accessing treatment.



Name		Blood samples		Blood samples not		
Age: median(IQR) 502 17.5(11-29) 171 12(6-21) <0.001	Variable		available (n=502)			P-Value
Sex : female 248 49.4 84 49.1 0.950 Religion Traditional 204 40.6 93 54.4 Christian 231 46.0 64 37.4 48 20.005 46.0 64 37.4 48.2 0.005 20.007 20.005 20.007 20.007 20.007 20.005 20.007 <		n	%	n	%	
Religion Cartest Car	Age: median(IQR)	502	17.5(11-29)	171	12(6-21)	< 0.001
Traditional 204 40.6 93 54.4 Christian 231 46.0 64 37.4 Islam 67 13.4 14 8.2 0.005 Education level: Total control con	Sex: female	248	49.4	84	49.1	0.950
Christian 231 46.0 64 37.4 0.005 Education level: 13.4 14 8.2 0.005 Primary 233 44.4 83 48.5 Primary 239 47.6 77 45.0 Secondary 29 5.8 11 6.4 Tertiary 11 2.2 0 0 0.213 Marrial status: 305 60.8 129 75.4 26 Single 101 20.1 16 9.4 48 16 3 1.8 1.0 4.0	Religion					
Islam	Traditional	204	40.6	93	54.4	
None 223	Christian	231	46.0	64	37.4	
None 223 44.4 83 48.5 Primary 239 47.6 77 45.0 Secondary 29 5.8 11 6.4 Tertiary 11 2.2 0 0 0.213 Marital status: Single 101 20.1 16 9.4 Married 305 60.8 129 75.4 Married 30 6.0 9 5.2 Widowed 30 6.0 9 5.2 Widowed 58 11.6 14 8.2 0.007 Coccupation: Farmer 269 53.6 104 60.8 17 Trader 112 22.3 33 19.3 0.432 Casual 48 9.6 13 7.6 0.432 Social economic status: 2 2 17.0 17.0 17.0 17.0 0.432 Less poor 96 19.1 <td>Islam</td> <td>67</td> <td>13.4</td> <td>14</td> <td>8.2</td> <td>0.005</td>	Islam	67	13.4	14	8.2	0.005
Primary 239 47.6 77 45.0 Accordary Secondary 29 5.8 11 6.4 Accordary Descendary 11 2.2 0 0 0.213 Marital status: Name of the status: Image: Colspan="8" of the status of the	Education level:					
Secondary 29 5.8 11 6.4 Tertiary 11 2.2 0 0 0.213 Marital status: Single 101 20.1 16 9.4 Married 305 60.8 129 75.4 Separated 8 1.6 3 1.8 2.75.4 Separated 8 1.6 3 1.8 3.0 6.0 9 5.2 4.0 6.0 9 5.2 5.0 6.0 9 5.2 5.0 6.0 9 5.2 6.0 9 5.2 6.0 9 5.2 7.0 6.0 9 5.2 7.0	None	223	44.4	83	48.5	
Tertiary 11 2.2 0 0 0.213 Marital status: 101 20.1 16 9.4 Married 305 60.8 129 75.4 Separated 8 1.6 3 1.8 Divorced 30 6.0 9 5.2 Widowed 58 11.6 14 8.2 0.007 Occupation: Farmer 269 53.6 104 60.8 17 60.8 17 7.6 10 60.8 19.3 19.3 10 10 10 10 20.3 33 19.3 10 10 20.3 33 19.3 10 10 20.3 13 7.6 10 10 20.9 29 17.0 10 10 20.9 29 17.0 10 10 20.1 33 19.3 10 10 10 20.1 33 19.3 10 10 10 20.1 <th< td=""><td>Primary</td><td>239</td><td>47.6</td><td>77</td><td>45.0</td><td></td></th<>	Primary	239	47.6	77	45.0	
Marital status: Incompany of the part	Secondary	29	5.8	11	6.4	
Single Married 101 305 60.8 60.8 129 75.4 129 75.4 Separated Separated 8 1.6 3 1.8 Divorced 30 6.0 9 5.2 Widowed 58 11.6 14 8.2 0.007 Occupation: Farmer 269 53.6 104 60.8 Trader 112 22.3 33 19.3 Casual 48 9.6 13 7.6 Other 73 14.5 21 12.3 0.432 Social economic status: Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 8(6-10) 171 8(4-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Risk and safety concerns beliefs: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stereotype about PWE: median(IQR) 502 7(2-13) 171 5(6-10) 0.006 Stigma score: Median(IQR) 502 15.7(0-43) 171 16.61(0.66) 0.0293	Tertiary	11	2.2	0	0	0.213
Married 305 60.8 129 75.4 Separated 8 1.6 3 1.8 Divorced 30 6.0 9 5.2 Widowed 58 11.6 14 8.2 0.007 Occupation: Farmer 269 53.6 104 60.8 17 Trader 112 22.3 33 19.3 19.3 19.3 19.3 19.3 19.3 10.4 60.8 13 7.6 10.4 60.8 13 7.6 10.4 60.8 13 7.6 10.4 60.8 13 7.6 10.4 60.8 13 7.6 10.4 60.8 13 7.6 10.4 60.8 12.3 0.432 12.3 0.432 12.3 0.432 12.3 0.432 12.3 0.432 12.3 0.432 12.3 12.3 0.432 12.4 12.3 12.4 12.3 12.4 12.3 12.4 12.3	Marital status:					
Separated 8 1.6 3 1.8 Divorced 30 6.0 9 5.2 Widowed 58 11.6 14 8.2 0.007 Occupation: Farmer 269 53.6 104 60.8 10.4 60.8 10.4 60.8 10.4 60.9 10.4 60.9 10.4 60.9 10.4 60.9 10.4 60.9	Single	101	20.1	16	9.4	
Divorced Widowed 30 6.0 9 5.2 0.007 Occupation: 58 11.6 14 8.2 0.007 Farmer 269 53.6 104 60.8 7.6 60.8 7.6 7.7 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 </td <td>Married</td> <td>305</td> <td>60.8</td> <td>129</td> <td>75.4</td> <td></td>	Married	305	60.8	129	75.4	
Widowed 58 11.6 14 8.2 0.007 Occupation:	Separated	8	1.6	3	1.8	
Occupation: 269 53.6 104 60.8 Trader 112 22.3 33 19.3 Casual 48 9.6 13 7.6 Other 73 14.5 21 12.3 0.432 Social economic status: Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 12(8-15) 171 16(14-16) 0.099 Beliefs about cultural treatment: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Risk and safety concerns beliefs: median(IQR) 502 8(6-12) 171 8(6-12) 0.9	Divorced	30	6.0	9	5.2	
Farmer 269 53.6 104 60.8 Trader 112 22.3 33 19.3 Casual 48 9.6 13 7.6 Other 73 14.5 21 12.3 0.432 Social economic status: Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: 502 16(15-16) 171 16(14-16) 0.099 Beliefs about cultural treatment: 502 8(8-8) 171 8(8-8) 0.644 median(IQR) 502 8(6-12) 171 8(6-12) 0.930 St	Widowed	58	11.6	14	8.2	0.007
Trader 112 22.3 33 19.3 A Casual 48 9.6 13 7.6 7.6 Other 73 14.5 21 12.3 0.432 Social economic status: Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: 502 8(6-10) 171 8(4-10) 0.259 median(IQR) 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: 502 12(8-15) 171 12(8-15) 0.798 median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Stereotype about PWE: 502 8(6-12) 171 8(6-12) 0.930 Stigma score: Median(IQR) 502 <	Occupation:					
Casual Other 48 9.6 13 7.6 0.432 Social economic status: 105 20.9 29 17.0<	Farmer	269	53.6	104	60.8	
Other 73 14.5 21 12.3 0.432 Social economic status: Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 12(8-15) 171 16(14-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 8(8-8) 171 8(8-8) 0.798 Risk and safety concerns beliefs: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stereotype about PWE: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stigma score: Median(IQR) 502 7(2-13) 171 16.61(0.66) 0.293	Trader	112	22.3	33	19.3	
Company	Casual	48	9.6	13	7.6	
Least poor 105 20.9 29 17.0 Less poor 96 19.1 38 22.2 Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Risk and safety concerns beliefs: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stereotype about PWE: median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Other	73	14.5	21	12.3	0.432
Less poor 96 19.1 38 22.2	Social economic status:					
Poor 101 20.1 33 19.3 Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 12(8-15) 171 12(8-15) 0.798 Risk and safety concerns beliefs: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Stereotype about PWE: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stigma score: Median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Least poor	105	20.9	29	17.0	
Very poor 92 18.3 40 23.4 Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 12(8-15) 171 12(8-15) 0.798 Risk and safety concerns beliefs: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Stereotype about PWE: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stigma score: Median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Less poor	96	19.1	38	22.2	
Most poor 108 21.5 31 18.1 0.401 Beliefs about causes of epilepsy: median(IQR) 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: median(IQR) 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: median(IQR) 502 12(8-15) 171 12(8-15) 0.798 Risk and safety concerns beliefs: median(IQR) 502 8(8-8) 171 8(8-8) 0.644 Stereotype about PWE: median(IQR) 502 8(6-12) 171 8(6-12) 0.930 Stigma score: Median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Poor	101	20.1	33	19.3	
Beliefs about causes of epilepsy: 502 8(6-10) 171 8(4-10) 0.259 Beliefs about biomedical treatment: 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: 502 12(8-15) 171 12(8-15) 0.798 Beliefs about cultural treatment: 502 8(8-8) 171 8(8-8) 0.644 Risk and safety concerns beliefs: 502 8(8-8) 171 8(6-12) 0.930 Stereotype about PWE: 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Very poor	92	18.3	40	23.4	
median(IQR) Beliefs about biomedical treatment: 502 16(15-16) 171 16(14-16) 0.009 median(IQR) Beliefs about cultural treatment: 502 12(8-15) 171 12(8-15) 0.798 median(IQR) Stereotype about PWE: 502 8(8-8) 171 8(8-8) 0.644 median(IQR) 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Most poor	108	21.5	31	18.1	0.401
Beliefs about biomedical treatment: 502 16(15-16) 171 16(14-16) 0.009 Beliefs about cultural treatment: 502 12(8-15) 171 12(8-15) 0.798 median(IQR) 502 8(8-8) 171 8(8-8) 0.644 stereotype about PWE: 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293		502	8(6-10)	171	8(4-10)	0.259
median(IQR) 502 12(8-15) 171 12(8-15) 0.798 median(IQR) 502 8(8-8) 171 8(8-8) 0.644 median(IQR) 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	median(IQR)					
median(IQR) 502 8(8-8) 171 8(8-8) 0.644 median(IQR) 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293		502	16(15-16)	171	16(14-16)	0.009
Risk and safety concerns beliefs: 502 8(8-8) 171 8(8-8) 0.644 median(IQR) 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293		502	12(8-15)	171	12(8-15)	0.798
Stereotype about PWE: 502 8(6-12) 171 8(6-12) 0.930 median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Risk and safety concerns beliefs:	502	8(8-8)	171	8(8-8)	0.644
Stigma score : Median(IQR) 502 7(2-13) 171 5(2-12) 0.176 Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293	Stereotype about PWE:	502	8(6-12)	171	8(6-12)	0.930
Distance to health facility(Kms) 502 15.7(0.43) 171 16.61(0.66) 0.293		502	7(2-13)	171	5(2-12)	0.176
Paying for AEDs: 181 361 46 269 0.029	Paying for AEDs:	181	36.1	46	26.9	0.029

Learning difficulties:	136	27.1	45	26.3	0.843
Duration of epilepsy					
<1	27	6.6	17	12.8	
1-3	35	8.6	23	17.39	
3-5	36	8.9	10	7.5	
>5	309	75.9	83	62.4	0.002
How often have you had seizures in the last 3 months					
None	142	28.3	67	39.2	
1-3	163	32.5	57	33.3	
4-6	78	15.5	16	9.4	
>6	119	23.7	31	18.1	0.017
Focal seizures	170	33.8	58	33.9	0.998
Injury during seizures: mean (SE)	502	55.0	171	39.2	< 0.001
No of AEDs:					
Monotherapy	177	60	43	70.5	
Polytherapy	118	40	18	29.5	0.160
Duration of medication					
<1	57	19.3	14	23.0	
1-3	86	29.2	19	31.2	
4-5	36	12.2	5	8.2	
>5	116	39.3	23	37.7	0.767
Reported side effects of AED	24	8.1	8	13.1	0.216
AED stored out of sight	200	67.8	48	78.7	0.092
Good relation with provider	254	86.1	57	93.4	0.116
Availability of family support	238	80.7	49	80.3	0.959
Self-reported non-adherence	163	55.3	29	47.5	0.271

Supplementary Table: Comparison between those who gave blood samples and those who did not give blood samples.