

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



LSHTM Research Online

Mbuba, CK; Ngugi, AK; Fegan, G; Ibinda, F; Muchohi, SN; Nyundo, C; Odhiambo, R; Edwards, T; Odermatt, P; Carter, JA; +1 more... Newton, CR; (2012) Risk factors associated with the epilepsy treatment gap in Kilifi, Kenya: a cross-sectional study. *Lancet neurology*, 11 (8). pp. 688-696. ISSN 1474-4422 DOI: [https://doi.org/10.1016/S1474-4422\(12\)70155-2](https://doi.org/10.1016/S1474-4422(12)70155-2)

Downloaded from: <http://researchonline.lshtm.ac.uk/251151/>

DOI: [https://doi.org/10.1016/S1474-4422\(12\)70155-2](https://doi.org/10.1016/S1474-4422(12)70155-2)

**Usage Guidelines:**

Please refer to usage guidelines at <https://researchonline.lshtm.ac.uk/policies.html> or alternatively contact [researchonline@lshtm.ac.uk](mailto:researchonline@lshtm.ac.uk).

Available under license: <http://creativecommons.org/licenses/by-nc-nd/2.5/>

<https://researchonline.lshtm.ac.uk>

# THE LANCET **Neurology**

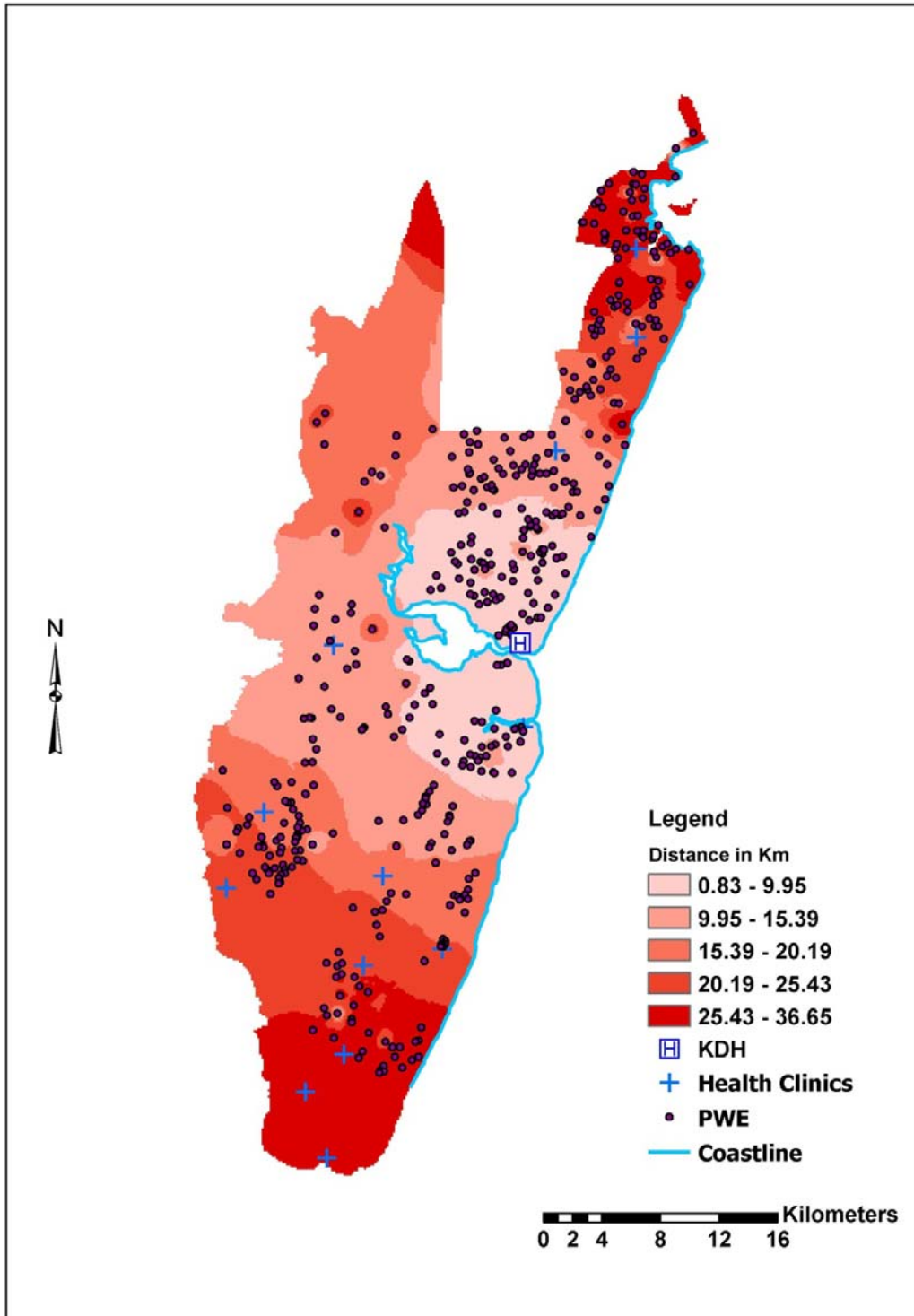
## **Supplementary webappendix**

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](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.



| Variable  | Blood samples available (n=502) |             | Blood samples not available (n=171) |             | P-Value |
|---|---------------------------------|-------------|-------------------------------------|-------------|---------|
|   | n                               | %           | n                                   | %           |         |
| <b>Age:</b> median(IQR)                                   | 502                             | 17.5(11-29) | 171                                 | 12(6-21)    | <0.001  |
| <b>Sex :</b> female                                       | 248                             | 49.4        | 84                                  | 49.1        | 0.950   |
| <b>Religion</b>   |                                 |             |                                     |             |         |
| Traditional   | 204                             | 40.6        | 93                                  | 54.4        | 0.005   |
| Christian   | 231                             | 46.0        | 64                                  | 37.4        |         |
| Islam   | 67                              | 13.4        | 14                                  | 8.2         |         |
| <b>Education level:</b>                                   |                                 |             |                                     |             |         |
| None  | 223                             | 44.4        | 83                                  | 48.5        | 0.213   |
| Primary   | 239                             | 47.6        | 77                                  | 45.0        |         |
| Secondary   | 29                              | 5.8         | 11                                  | 6.4         |         |
| Tertiary  | 11                              | 2.2         | 0                                   | 0           |         |
| <b>Marital status:</b>                                    |                                 |             |                                     |             |         |
| Single  | 101                             | 20.1        | 16                                  | 9.4         | 0.007   |
| 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         |         |
| <b>Occupation:</b>  |                                 |             |                                     |             |         |
| Farmer  | 269                             | 53.6        | 104                                 | 60.8        | 0.432   |
| Trader  | 112                             | 22.3        | 33                                  | 19.3        |         |
| Casual  | 48                              | 9.6         | 13                                  | 7.6         |         |
| Other   | 73                              | 14.5        | 21                                  | 12.3        |         |
| <b>Social economic status:</b>                            |                                 |             |                                     |             |         |
| Least poor  | 105                             | 20.9        | 29                                  | 17.0        | 0.401   |
| 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        |         |
| <b>Beliefs about causes of epilepsy:</b><br>median(IQR)   | 502                             | 8(6-10)     | 171                                 | 8(4-10)     | 0.259   |
| <b>Beliefs about biomedical treatment:</b><br>median(IQR) | 502                             | 16(15-16)   | 171                                 | 16(14-16)   | 0.009   |
| <b>Beliefs about cultural treatment:</b><br>median(IQR)   | 502                             | 12(8-15)    | 171                                 | 12(8-15)    | 0.798   |
| <b>Risk and safety concerns beliefs:</b><br>median(IQR)   | 502                             | 8(8-8)      | 171                                 | 8(8-8)      | 0.644   |
| <b>Stereotype about PWE :</b><br>median(IQR)              | 502                             | 8(6-12)     | 171                                 | 8(6-12)     | 0.930   |
| <b>Stigma score :</b> Median(IQR)                         | 502                             | 7(2-13)     | 171                                 | 5(2-12)     | 0.176   |
| <b>Distance to health facility(Kms)</b>                   | <b>502</b>                      | 15.7(0.43)  | 171                                 | 16.61(0.66) | 0.293   |
| <b>Paying for AEDs:</b>                                   | 181                             | 36.1        | 46                                  | 26.9        | 0.029   |

|   |     |      |     |       |        |
|---|-----|------|-----|-------|--------|
| <b>Learning difficulties:</b>                               | 136 | 27.1 | 45  | 26.3  | 0.843  |
| <b>Duration of epilepsy</b>                                 |     |      |     |       |        |
| <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  |
| <b>How often have you had seizures in the last 3 months</b> |     |      |     |       |        |
| 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  |
| <b>Focal seizures</b>                                       | 170 | 33.8 | 58  | 33.9  | 0.998  |
| <b>Injury during seizures: mean (SE)</b>                    | 502 | 55.0 | 171 | 39.2  | <0.001 |
| <b>No of AEDs:</b>  |     |      |     |       |        |
| Monotherapy   | 177 | 60   | 43  | 70.5  |        |
| Polytherapy   | 118 | 40   | 18  | 29.5  | 0.160  |
| <b>Duration of medication</b>                               |     |      |     |       |        |
| <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  |
| <b>Reported side effects of AED</b>                         | 24  | 8.1  | 8   | 13.1  | 0.216  |
| <b>AED stored out of sight</b>                              | 200 | 67.8 | 48  | 78.7  | 0.092  |
| <b>Good relation with provider</b>                          | 254 | 86.1 | 57  | 93.4  | 0.116  |
| <b>Availability of family support</b>                       | 238 | 80.7 | 49  | 80.3  | 0.959  |
| <b>Self-reported non-adherence</b>                          | 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.**