

## 1 Appendix 1. Screening instrument<sup>1</sup>

- 2 Q1. Have you ever lost consciousness?  
3 A. Do you fall when this happens?  
4 B. Do you bite your tongue when this happens?  
5 C. Do you lose control of your bladder when this happens?
- 6 Q2. Have you ever had a time when you didn't know where you were?  
7 A. Was it more than once?  
8 B. Do you experience abnormal smells or sensations when this happens?  
9 C. Does it only occur during a fever?
- 10 Q3. Have you had time of violent shaking of the limbs?  
11 Q4. Have you had tremors that lasted longer than a year?  
12 Q5. Have you had other unusual movements lasting longer than a day?  
13 Q6. Have you ever had weakness in your arms or legs for more than a day?  
14 A. Was the weakness only on one side of your body?  
15 B. Do you still have the weakness right now?  
16 C. Were you paralyzed?
- 17 Q7. Have you ever had loss of feeling or odd feelings in your arms or legs for more than a  
18 day?  
19 A. Was it only on one side of your body?  
20 B. Do you still have this loss of feeling right now?  
21 C. Did you lose complete feeling?
- 22 Q8. Have you ever lost vision to one side?  
23 Q9. Have you ever had a time when you couldn't speak, or couldn't understand what people  
24 were saying to you?  
25 A. During this time, did you lose vision to one side?  
26 B. During this time, did you have weakness on one side of the body?  
27 C. During this time, did you lose feeling on one side of the body?
- 28 Q10. Have you had any change in your speech?  
29 Q11. Has your face or part of your face been paralyzed for more than a day?  
30 Q12. Do you hear well?  
31 Q13. Do you walk well?  
32 A. Do you use a cane/walking stick or wheelchair?  
33 B. Do you fall to the ground?
- 34 Q14. Do you get headaches?  
35 A. In the last year, have you ever had a headache that made you not do your normal  
36 daily activities?  
37 B. Is the headache mostly one-sided?  
38 C. With these headaches do you have problems seeing, like seeing black spots, stars  
39 or zigzag lines?  
40 D. With these headaches, do you get nauseous or vomit?  
41 E. With these headaches, do you get weak or numb in the arms or legs?  
42 F. Do these headaches occur only when you have a fever?
- 43 Q15. In the last year, have you ever had back pain that caused you to stay in bed all day  
44 instead of doing your normal daily activities?  
45 Q16. In the last year, have you had any of fever with loss of consciousness?  
46 Q17. In the last year have you been admitted to the hospital?  
47 A. What was the cause?  
48 B. Where were you admitted?

- 1 Q18. Do you have any problems using your hands, such as with using a spoon, stirring or  
2 buttoning?  
3 A. Is it because of pain?  
4 Q19. Has there been any deterioration of your memory within the last five years?  
5 A. Does it stop you from doing your job, or normal activities?  
6 Q20. Have you ever had a stroke?  
7 Q21. Have you ever had epilepsy, fits or seizure?  
8 Q22. Have you ever had meningitis?  
9 Q23. Have you ever had tetanus?  
10 Q24. Have you ever had any disease that affected your brain, spinal cord or nerves?  
11 E1. Hold both arms above your head for 30seconds.  
12 E2. Pick up pen from ground.  
13 E3. Close your eyes. Feel cloth sample. Is it smooth or rough? (Right and left separately).  
14 E4. Can you feel the vibration of the tuning fork on your ankle? (Right and left separately).  
15 E5. Put your hands out in front of you. Hold for 15seconds. Close your eyes. Touch your  
16 nose with the right index. Repeat it using your left index.  
17 E6. Tap your right thumb and index finger together rapidly. Repeat with your left.  
18 E7. Look at my nose. Am I holding up one or five fingers? (Test four quadrants).  
19 E8. Stick your tongue straight out.  
20 E9. Smile widely for me.  
21 E10. Follow my fingers with your eyes.  
22 E11. Repeat the following sentence 'Yuma has built a house'.  
23 E12. Close your eyes. Can you hear the paper crinkling? (Right and left separately).  
24 E13. Walk four meters.  
25 E14. Walk heel to toe along the line (only if able to do E13).  
26 E15. Stand with your feet close together.  
27 E16. Stand with your eyes closed for 15seconds (only if able to do E15).  
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- 29 1. Bower JH, Howlett W, Maro VP, Wangai H, Sirima N, Reyburn H. A screening instrument to  
30 measure the prevalence of neurological disability in resource-poor settings.  
31 *Neuroepidemiology*. 2009;32(4):313-20.

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