

Additional file 2: Neurological Questionnaire

Prevalence of epilepsy in the onchocerciasis endemic middle belt of Ghana after 27 years of Mass Drug

Administration with ivermectin

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Neurology questionnaire

DATE: _____ / _____ / _____

FULL NAME OF THE SPECIALISED HEALTH CARE WORKER: _____

1.1.1 PARTICIPANT IDENTIFICATION

Participant ID _____
Last name (*in capital letters*): _____
First name: _____

1.1.2 PARTICIPANT IDENTIFICATION

Participant ID _____
Last name (*in capital letters*): _____
First name: _____
Address (*any information that allows locating the individual*): _____
Town / Village: _____
State: _____
Phone number: _____
Sex: ☐ Male ☐ Female
Age: _____ years
Date of birth: ____ / ____ / ____
Place of birth: _____
Country of birth: _____
Ethnic group: _____
Marital status: ☐ Married ☐ Living with parents ☐ In partnership
☐ Living alone ☐ other, specify _____

Is the participant answering himself / herself? ☐ YES ☐ NO
If NO, who is answering and what is the relationship between the participant and respondent?

Full name: _____
Relation to participant: ☐ Mother ☐ Father ☐ Sibling
☐ other, specify _____

1.1.3 DEMOGRAPHIC DATA

Since how long is the participant lived in the village? _____ YEARS

IF less than 1 year: how many MONTHS? _____

1.1.4 HISTORY OF EPILEPSY

Has the participant had a seizure in the last 5 years?

☐ YES ☐ NO ☐ DON'T KNOW

What is the number of seizures since onset?

☐ One attack ☐ Two or more seizures

If only two seizures, were they more than 24h apart? ☐ YES ☐ NO ☐ DON'T KNOW

Aura / sensation (hearing, seeing, tasting, smelling, feeling) before seizures:

☐ YES ☐ NO ☐ DON'T KNOW

Episodes of loss of consciousness

☐ YES ☐ NO ☐ DON'T KNOW

Seizures with passing urine or stool on self and /or foaming at the mouth

☐ YES ☐ NO ☐ DON'T KNOW

Has the participant had a seizure within the last 12 months?

☐ YES ☐ NO ☐ DON'T KNOW

IF YES, in which month has the last seizure been experienced?

MONTH: __ ☐ DON'T KNOW

What is the current frequency of the seizures?

☐ Yearly (if less than 1 per month)

☐ Monthly (if less than 4 per month)

☐ Weekly (if less than 7 per week)

☐ Daily (if more than 7 per week)

Specify number: _____ per _____

How many seizures did you have LAST WEEK? ☐ number _____ ☐ None ☐ DON'T KNOW

Was the onset of seizures within the first year of life?

☐ YES ☐ NO ☐ DON'T KNOW

IF the onset of the seizures was within the first year of life:

☐ During the first 10 days of life

☐ More than 10 days to 6 month

☐ More than 6 month to 1 year

If the onset of seizures was after the age of one, at what age?

_____ years (try to estimate if not known exactly)

What was the type of the initial seizures? (different types of seizures possible)

- ☐ Generalized seizures with loss of consciousness
- ☐ Atonic seizures (drop attacks)
- ☐ Absences
- ☐ Nodding seizures
- ☐ Focal seizures, consciousness not lost
- ☐ Focal seizures with decreased consciousness
- ☐ Secondarily generalized bilateral seizures
- ☐ Others, specify: _____

What type are currently the seizures? (different types of seizures possible)

- ☐ Generalized seizures with loss of consciousness
- ☐ Atonic seizures (drop attacks)
- ☐ Absences
- ☐ Nodding seizures
- ☐ Focal seizures, consciousness not lost
- ☐ Focal seizures with decreased consciousness
- ☐ Secondarily generalized bilateral seizures
- ☐ Others, specify: _____

1.1.5 MEDICAL HISTORY

Family history of seizures ☐ YES ☐ NO ☐ DON'T KNOW

IF YES, specify who these are (tick all that apply)

- ☐ Siblings (brother/sister); No. of affected siblings _____
- ☐ Father ☐ Mother ☐ Grandparent(s)

Family history of mental illness ☐ YES ☐ NO ☐ DON'T KNOW

Questions for the mother of the participant

Did the pregnancy of the mother of the participant proceed normally?

- ☐ YES ☐ NO ☐ DON'T KNOW

If NO, specify: _____

Mode of delivery for the affected child:

- ☐ Spontaneous Vaginal Delivery
- ☐ Assisted Vaginal Delivery
- ☐ Caesarean section

Was the interviewed participant born at term (pregnancy had completed 9 months)?

- ☐ YES ☐ NO ☐ DON'T KNOW

Did the interviewed participant cry immediately after birth?

- ☐ YES ☐ NO ☐ DON'T KNOW

What was the birth weight? _____ GRAMS ☐ DON'T KNOW

Psychomotor Development during Childhood:

Prior to onset of seizures

Was the child growing normally prior to the onset of the seizures?

☐ Yes ☐ No ☐ DON'T KNOW ☐ NAP

IF NO, at what age did the abnormal growing appear? _____ years

Did the child learn to do things like other children of his/her age prior to the onset of the seizures?

☐ Yes ☐ No ☐ DON'T KNOW ☐ NAP

IF NO, at what age did the learning difficulty start? _____ year

Compared with other children of his/her age, did the child appear in any way mentally backward, dull or slow before the onset of the seizures?

☐ Yes ☐ No ☐ DON'T KNOW ☐ NAP

IF YES, at what age did it start? _____ Years

Since the onset of seizures,

Compared with other children of his/her age, did the child learned to do things like other children?

☐ NAP ☐ Normal ☐ Delayed ☐ Abnormal

☐ Others, specify: _____

Compared with other children of his/her age, did the child appear in any way mentally backward, dull or slow?

☐ NAP ☐ Normal ☐ Delayed ☐ Abnormal

☐ Others, specify: _____

Occurrence of severe disease in the past:

Has the interviewed participant suffered from severe measles before the onset of epileptic seizures?

☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsy Years ☐ less than 1 year

Has the interviewed participant suffered from a severe form of malaria before the onset of epileptic seizures?

☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsy Years ☐ less than 1 year

Has the interviewed participant suffered from encephalitis/meningitis before the onset of epileptic seizures?

☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsy Years ☐ less than 1 year

Has the participant had a head injury with loss of consciousness before the onset of epileptic seizures?

☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsy Years ☐ less than 1 year

Has the participant had a prolonged post-traumatic coma before the onset of epileptic seizures?

☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsy Years ☐ less than 1 year

Has the patient presented febrile convulsions in the past? ☐ YES ☐ NO ☐ DON'T KNOW

If Yes how long before the onset of epilepsyYears ☐ less than 1 year

Was the onset of epilepsy following another illness?

☐ YES ☐ NO ☐ DON'T KNOW

If YES, specify the illness: _____

If Yes how long before the onset of epilepsyYears ☐ less than 1 year

Has the participant has a history of excessive alcohol consumption?

☐ YES ☐ NO ☐ DON'T KNOW ☐ Not applicable*

Has the participant has a history of drugs abuse?

☐ YES ☐ NO ☐ DON'T KNOW ☐ Not applicable*

1.1.6 GENERAL EXAMINATION Done ☐ Not done ☐

BODY WEIGHT (kg): _____ . _____kg

HEIGHT (cm): _____cm

How is the general condition of the interviewed participant?

☐GOOD ☐CORRECT ☐POOR

Thoracic abnormalities ☐ YES ☐ NO

If yes specify _____

Facial abnormalities ☐ YES ☐ NO

If yes specify _____

Does the person look much younger than he/she is? ☐ YES ☐ NO

If yes and if the person > 16 years are there external signs of sexual development conform to age:

☐ YES ☐ NO ☐ EXAMINATION DECLINED

If NO, specify:

girls: ☐ Breast not developed
girls and boys: ☐ No pubic hair

Ophthalmology ☐ NORMAL ☐ ABNORMAL VISION
☐ BLIND ONE EYE ☐ BOTH EYES AFFECTED

Burn scars ☐ YES ☐ NO

Itching ☐ YES ☐ NO

Papular nodular eruption ☐ YES ☐ NO

Depigmented lesions (leopard skin) ☐ YES ☐ NO

Dry, thick wrinkled skin (lizard skin) ☐ YES ☐ NO

Suspected onchocerciasis nodules ☐ YES ☐ NO

If yes, number of nodules _____

1.1.7 NEUROLOGICAL EXAMINATION

Is the participant alert? ☐ YES ☐ NO

Fully oriented in place/time/person ☐ YES ☐ NO

Is the participant's cognitive development comparable with peers?
☐ YES ☐ NO

Normal vision ☐ YES ☐ NO

Normal hearing ☐ YES ☐ NO

Normal eye movements? ☐ YES ☐ NO

Generalized muscle wasting ☐ YES ☐ NO

Paresis ☐ YES ☐ NO
if YES specify _____

Contractures ☐ YES ☐ NO

Is the participant walking normally? ☐ YES ☐ NO

IF NO, specify

- ☐ Ataxic (wide base) gait
- ☐ Waddling gait (like a duck)
- ☐ Spastic gait –with tip toe walking
- ☐ Hemiplegic – with one sided weakness
- ☐ Other, specify_____

Psychiatric symptoms

Does the participant show aggressive episodes? ☐ YES ☐ NO

Does the participant suffer from another neuro-psychiatric / psychological problem?

☐ YES ☐ NO ☐ DON'T KNOW

IF YES, specify_____

Physical / Functional Indices: Please mark the most accurate description of the current functional state of the person with epilepsy, as observed during the evaluation

1	No significant disability despite symptoms; able to carry out all usual duties and activities
2	Slight disability; unable to carry out all previous activities, but able to look after own affairs without assistance
3	Moderate disability; requiring some help, but able to walk without assistance
4	Moderately severe disability; unable to walk without assistance and unable to attend to own bodily needs without assistance
5	Severe disability; bedridden, incontinent and requiring constant nursing care and attention

1.1.8 CASE CLASSIFICATION

- ☐ Epilepsy
- ☐ Other diagnosis

If other diagnosis:

- ☐ Recurrent febrile convulsions
- ☐ Dizziness / syncope
- ☐ Paroxysmal vertigo
- ☐ Severe anaemia

- ☐ Mental retardation without epilepsy
- ☐ Psychiatric illness without epilepsy
- ☐ Classic migraine
- ☐ Only one seizure
- ☐ Other, specify _____

1.1.9 TREATMENT

What is or was the type of seizure medication taken by the participant?

- ☐ No treatment ☐ DON'T KNOW
- ☐ Traditional ☐ anti-epileptic drug
- ☐ Mixed

If anti-epileptic drug treatment: Which substance is taken by the participant (additionally you may check patient's treatment record)?

- | | | |
|--------------------------------|------------------------------|---|
| Phenytoin | ☐ YES | ☐ NO if yes dose _____ |
| Sodium valproate | ☐ YES | ☐ NO if yes dose _____ |
| Phenobarbital | ☐ YES | ☐ NO if yes dose _____ |
| Carbamazepin | ☐ YES | ☐ NO if yes dose _____ |
| Diazepam | ☐ YES | ☐ NO if yes dose _____ |
| Ethosuximide | ☐ YES | ☐ NO if yes dose _____ |
| Other anti-epileptic treatment | ☐ YES | ☐ NO if yes dose _____ |
- If YES, specify: _____

Compliance: Is the participant taking the anti-epileptic drug treatment regularly?

- ☐ YES ☐ NO

If NO, why?

- ☐ Side effects
- ☐ (Temporary) non-availability of medication
- ☐ Lack of financial means to access medication
- ☐ DON'T KNOW
- ☐ Other, specify _____

Are you currently in followed up in a health centre for treatment of epilepsy:

- ☐ YES ☐ NO

If yes, specify where _____

1.2.10 IVERMECTIN USE

Has the participant ever received ivermectin?

- ☐ YES ☐ NO ☐ DON'T KNOW

☐ NOT APPLICABLE (according to exclusion criteria, as follows):

If yes, how many years: _____ years

Did the person took ivermectin before the development of the seizures ☐ YES ☐ NO
☐ DON'T KNOW

Did the person take ivermectin during the last distribution _____?

Action Taken by reporting officer: referred for treatment ☐ YES ☐ NO

If yes, where? _____