

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation
<b>Title and abstract</b>	1	(a) Indicate the study's design with a commonly used term in the title or the abstract <b>Done page 2</b>
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found. <b>Done page 2</b>
<b>Introduction</b>		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported <b>Page 4:</b> Although podoconiosis is one of the major causes of lower legs swelling worldwide, understanding of the geographical distribution of the disease is incomplete. In Cameroon, few studies have been conducted, and these have indicated varied and localized distribution of the disease.
Objectives	3	State specific objectives, including any prespecified hypotheses <b>Page 4:</b> We conducted this countrywide mapping survey to determine the prevalence and spatial distribution of podoconiosis in Cameroon.
<b>Methods</b>		
Study design	4	Present key elements of study design early in the paper <b>Page 6:</b> This countrywide mapping survey was designed as a population based cross sectional survey using a multi stage sampling design with stratification by risk of podoconiosis.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection <b>Page 6:</b> The Republic of Cameroon is a country of 475,650 km <sup>2</sup> located in Central Africa, and bordered by Nigeria, Chad, Central African Republic, Equatorial Guinea, Gabon, and the Republic of the Congo (see Figure 1). The last official census, which estimated a total population of 17.5 million, was undertaken in 2005. Subsequent projections raise the population estimate to 23.3 million people in 2015 [12].  The country is divided into ten administrative regions (Figure 1): Far North, North, Adamawa, Northwest, West, Southwest, Littoral, Central, East, and South. All ten regions of Cameroon were mapped for podoconiosis.
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. <b>Page 7:</b> To be included in the sample, people should have lived within the health district for at least ten years, and be greater than or equal to 15 years old. The following were excluded from the study: terminally ill patients who could not respond to the interview and patients with a mental health condition that would make interview difficult and results unreliable.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable <b>Page 7:</b> In this study, a podoconiosis case was defined as a person residing in the study district for at least 10 years, with bilateral, asymmetrical lymphedema of the lower limb present for more than one year, who was negative for all of the LF tests, and had a history of any of the following associated signs and symptoms. This enabled causes such as LF, onchocerciasis, leprosy, Milroy syndrome, heart or liver failure to be excluded before reaching the diagnosis of podoconiosis. Geographic coordinates from surveyed communities were collected on-the-go using the smartphones.

Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group. <b>Not applicable</b>
Bias	9	Describe any efforts to address potential sources of bias. <b>Done</b>
Study size	10	Explain how the study size was arrived at <b>Page 7:</b> The sample size was determined using 95% confidence limits and assuming a design effect of 15 (derived from community based survey data collected in Ethiopia in 2013). The number of individuals selected was estimated to detect a prevalence of 0.5% with 0.9% precision and 10% non-response rate. The minimum sample size was 3,933 individuals from 80 clusters.
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why. <b>Not applicable</b>
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding <b>Done</b> (b) Describe any methods used to examine subgroups and interactions <b>Done</b> (c) Explain how missing data were addressed <b>Not applicable</b> (d) If applicable, describe analytical methods taking account of sampling strategy <b>Not applicable</b> (e) Describe any sensitivity analyses <b>Not applicable</b>
<b>Results</b>		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed <b>Page 10:</b> The study was conducted in 40 districts in all 10 regions of Cameroon. From the 40 districts, 76 villages were included in the study. Overall 10,178 individuals from 4,603 households participated in the study. <b>Page 11:</b> Of the 83 lymphedema cases, none harbored <i>W. bancrofti</i> . Using the clinical algorithm [15], we excluded 31 cases for the following reasons: descending swelling (15); signs and symptoms of onchocerciasis (4); presence of hydrocele (3); known leprosy diagnosis (3); swelling reportedly started at age less than 3 years (2) or at birth (2); and finally, loss of sensation (1) and another who developed lymphedema after a major surgical procedure (b) Give reasons for non-participation at each stage <b>Not applicable</b> (c) Consider use of a flow diagram <b>Page 12:</b> Fig 4. Clinical algorithm for podoconiosis diagnosis. The diagnosis of podoconiosis in this study was conducted using history, physical examination and disease specific tests. The flow chart shows the results of the clinical examination and test.
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders <b>Page 12:</b> Among the 52 individuals with podoconiosis, the male to female ratio was 1.3:1. The majority of affected individuals were in the age group 25-64 years. The mean age at first noticing the swelling was 32 ( $\pm$ SD 17.3; range: 7–72) years. On average, women noticed swelling earlier (31.6, SD $\pm$ 18.3) than men (32.8, SD $\pm$ 16.7), though the difference was not significant (Chi-squared test, p-value = 0.800). Only 5.8% had noticed swelling when younger than 10 years of age. Overall, 21.2%

of people with podoconiosis had or remembered at least one blood relative with a similar condition. The majority (41.9%) of people with podoconiosis had stage two disease (Table 4); there was no significant difference in the distribution of disease stage among men and women.

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(b) Indicate number of participants with missing data for each variable of interest **Not applicable**

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Outcome data	15*	Report numbers of outcome events or summary measures
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included <b>Done</b> (b) Report category boundaries when continuous variables were categorized <b>Done</b> (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period <b>Not applicable</b>
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses <b>Not applicable</b>

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## Discussion

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Key results	18	Summarise key results with reference to study objectives <b>Page 15</b> This is the first national population-based survey of podoconiosis undertaken in Cameroon, and provides estimates of prevalence using clinical, parasitological and serological results among people $\geq 15$ years of age. The overall prevalence of lymphedema and podoconiosis was 0.81% and 0.51% respectively, and podoconiosis was found to be widespread in Cameroon, being present in nine of the ten regions of the country. The distribution showed micro-epidemiological heterogeneity with high prevalence clusters in some of the regions. The findings here justify interventions aimed at podoconiosis prevention and morbidity management. We anticipate that these results will inform the design of a nationwide podoconiosis control program and serve as a baseline against which future performance is measured.
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias <b>Page 16:</b> Nonetheless, our study is not without potential limitations; our sampling was based on the assumption that the environmental drivers in Cameroon would be similar to those in Ethiopia. These assumptions appear to hold true, in that the highest prevalence rates were observed in areas defined through the predictive model as highly suitable for podoconiosis, and the lowest prevalence rates were observed in areas predicted to have lower suitability, according to environmental drivers identified in Ethiopian studies.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence <b>Page 16 and 17 Done</b>
Generalisability	21	Discuss the generalisability (external validity) of the study results. <b>Done.</b>
<b>Other information</b>		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based. <b>Done</b>

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\*Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).

S1 Table. Geographical distribution of lymphedema and podoconiosis in Cameroon								
Region	District	Health area	Community	Number screened	Lymphedema cases	Lymphedema prevalence (%)	Podoconiosis cases	Podoconiosis prevalence (%)
Adamawa	Bankim	Nyamboya	Nyamboya	146	0	0	0	0
		Bankim rural area	Mongbe	174	0	0	0	0
Central	Mbankomo	Ebeba	Ebeba	163	4	2.5	2	1.2
		MEFOMO	Mefomo	152	0	0	0	0
		ODZA	Ekoumdoum	308	0	0	0	0
		Meyo	Minkan	160	2	1.3	2	1.3
	Soa	Ntouissong	Ntoyissong	167	0	0	0	0
		Tin-Melen	Mbansan	213	1	0.5	0	0
	Mfou	Nkilzok	Kamba1 and 2	205	2	1	0	0
		Mfou	Mekomba	205	0	0	0	0
	Akonolinga	Abem	Abem	161	0	0	0	0
		Akonolinga Urbain	Nkolelssong	189	0	0	0	0
East	Nguelemendouka	Bika	Bang	117	0	0	0	0
		Nguelemendouka	Zapi	141	1	0.7	0	0
	Doume	Doume II	Mbala	135	2	1.5	1	0.8
		Motcheboun	Petit Bonando	132	2	1.5	1	0.8
	Lomie	Adjela	Pohempoum	188	0	0	0	0
		Lomie	Mintoum	186	0	0	0	0
	Batouri	Batouri Center II	Bongos	171	1	0.6	1	0.6
		Tapare	Tapare	125	1	0.8	1	0.8
Extreme North	Yagoua	Njongdong	Njongdong	116	2	1.7	1	0.9
		Bougaye	Bougaye	154	3	1.9	2	1.3
		Golonghini	Golonghini	113	1	0.9	1	0.9
		Koubi	Koubi	126	2	1.6	0	0

S1 Table. Geographical distribution of lymphedema and podoconiosis in Cameroon								
Region	District	Health area	Community	Number screened	Lymphedema cases	Lymphedema prevalence (%)	Podoconiosis cases	Podoconiosis prevalence (%)
	Maroua Rural	Salak	Salak	294	2	0.7	1	0.3
Littoral	Logbaba	Nkongui	Songmanyong	167	1	0.6	1	0.6
		Ndogpassi II	Loh-ka	137	0	0	0	0
		Dibombari	Yandom	92	0	0	0	0
		Bonangoh	Edjogmoa	134	0	0	0	0
	Nkongsamba	EBOUM-MBENG	Eboum	87	4	4.6	2	2.3
	Dibombari	Bomono	Bomono Bajedu	155	0	0	0	0
	Manjo	Kolla	Manengoteng	131	0	0	0	0
	Melong	Melong centre	Quartier 6	114	0	0	0	0
		Mbouroukou	Ekanang	121	0	0	0	0
North	Touboro	Touboro	Touboro	101	3	3	3	3
		Mbeng	Ribao	110	1	0.9	1	0.9
	Rey-Bouba	Rey Bouba Centre	Rey Bouba	114	2	1.8	1	0.9
		Kongrong	Kongrong	101	2	2	2	2
	Pitoa	Badjouma Radier	Badjouma Radier	266	4	1.5	0	0
North West	Kumbo Est	Kwanso	Kiffe II	183	3	1.6	1	0.5
		Bonso	Ngung/kovshon	162	0	0	0	0
	Bafut	Mbakong	Mbakong	57	2	3.5	2	3.5
		Tingoh	Tingoh	104	2	1.9	1	1
	Bali	Bali Urban	Boh Etoma	133	2	1.5	2	1.5
		Catholic	Nted	61	4	6.6	3	4.9
	Fundong	Aduk	Atuila	164	3	1.8	3	1.8
		Aduk	Ngwah	63	3	4.8	2	3.2
	Wum	Kumfutu	Kumfutu	186	7	3.8	5	2.7
West	Batcham	Batcham ville	Bapepa	102	0	0	0	0

**S1 Table. Geographical distribution of lymphedema and podoconiosis in Cameroon**

Region	District	Health area	Community	Number screened	Lymphedema cases	Lymphedema prevalence (%)	Podoconiosis cases	Podoconiosis prevalence (%)
	Bandjoun	Bamougong	Bameghang	108	0	0	0	0
		Famla 2	Bangang-fondji	122	0	0	0	0
		Famla 2	Djiogo	91	1	1.1	1	1.1
	Bamendjou	Bamendjou	Ndang	112	4	3.6	2	1.8
		Bameka	Messeng	91	0	0	0	0
	Santchou	Ngwatta	Ngwatta	117	1	0.9	1	0.9
		Fombap	Ntsala	109	0	0	0	0
	Mbouda	Bamesso	Kingplace	238	0	0	0	0
		Balachi	Tsedeng	11	0	0	0	0
	Malantouen	Malantouen health area	Njighait	109	0	0	0	0
		Matoupou	Mambantou	114	1	0.9	1	0.9
South West	Muyuka	Muyaka	Owe II	80	1	1.3	1	1.3
		Meanga	Mautu	42	0	0	0	0
	Mamfe	Mamfe	Hausa Quarter	110	2	1.8	2	1.8
		Mamfe Urban	Bachua-Akagbe	39	0	0	0	0
	Bangem	Bangem	Nkikoh	153	0	0	0	0
		MUABI	Muabi	105	0	0	0	0
	Kumba	kumba	teke	9	0	0	0	0
		Ekombe Bonji	Bana Quarter	120	0	0	0	0
	Tiko	Missellele	Missellele Village	111	0	0	0	0
		TIKO town	Keka I	57	0	0	0	0
	Tombel	Tombel	Kupe	78	0	0	0	0
		Ebonji	Tombel	72	0	0	0	0
	Akwaya	Akwaya	Motomo	55	0	0	0	0
		Bagundu	Ballin	197	1	0.5	1	0.5

S1 Table. Geographical distribution of lymphedema and podoconiosis in Cameroon								
Region	District	Health area	Community	Number screened	Lymphedema cases	Lymphedema prevalence (%)	Podoconiosis cases	Podoconiosis prevalence (%)
South	Ambam	Ambam	Meyo-Elie	240	3	1.3	1	0.4
		Ndjazeng	Ndjazeng	202	0	0	0	0



# Questionnaires for mapping of podoconiosis in Cameroon

## Participant information sheet

Dear Participant

### Predicting and mapping the geographical distribution of podoconiosis in Cameroon

My name is ....., and I am working with BSMS and University of Buea. You are invited to take part in this research study, which we hope will yield valuable information on the geographical distribution of elephantiasis. Before you decide whether to take part it is important for you to understand why we are collecting this information and what it will involve. Please take time to read this paper carefully and discuss it with friends and relatives if you wish to. Ask us if there is anything that is not clear or if you would like more information.

Before you decide we would like you to understand why the research is being done and what it would involve for you if you took part. One of our team will go through the information with you and answer any questions you may have. We'd suggest this should take about 30 minutes.

#### 1. What is the purpose of the study?

We are mapping elephantiasis (leg swelling) in Cameroon. Through this study we will identify the geographical distribution of the disease and environmental factors affecting the distribution. We hope that this will help us in scaling up prevention and treatment of elephantiasis throughout the country. With your permission, we intend to:

- 1. Ask you a series of questions about you and your family, your mental health and how you are feeling at the moment, the way you live and work, and in particular, the contact you have with the red soil. If you have elephantiasis, we will also ask questions related to the disease and how you have managed it.*
- 2. We would like to take a sample of blood. For this we prick your finger with a fine needle and take a drop of blood. The blood sample will help to see if you have LF and other related diseases or not. The samples will be analyzed here onsite. We will not test for any other diseases with this blood sample.*
- 3. In a few patients with leg swelling we would like to take some blood samples. The amount of blood is small (about 5ml or what is held on a small teaspoon). We will store this so we can do further checks to distinguish the type of elephantiasis you have.*

#### 2. Who is organizing and funding the research?

The research has been funded by the Wellcome Trust and the Wellcome Trust-Brighton & Sussex Centre for Global Health Research at Brighton & Sussex Medical School. These are UK-based funding bodies dedicated to improving human and animal health through research. The research is organized jointly by researchers in Cameroon and the UK. The research has been reviewed by the Institutional Review Board of the University of Buea and by Brighton & Sussex Medical School Research Governance and Ethics Committee.

#### 3. Why have I been invited?

Participants to include in this study have been selected randomly from the community and the households they live-in.

#### 4. Do I have to take part?

No. It is up to you to decide whether or not you wish to join the study. We will describe the study and go through this information sheet. If you agree to take part, we will ask you to sign a consent form.

**5. What will I have to do?**

The study participants are expected to respond to a short questionnaire administered using a mobile phone. A finger prick blood sample will be taken and analyzed on the spot to check whether you have lymphatic filariasis or not. In a few people with leg swelling, we will take additional blood (up to 5 ml) for further analysis to distinguish which type of elephantiasis you may have.

**6. What are the possible benefits of taking part?**

At the end of the questions, we will explain to you more about the condition and how to prevent and treat it. If appropriate, we will put you in touch with a treatment site if there is one nearby.

**7. Are there any possible disadvantages or risks of taking part?**

We do not anticipate any harm to you from asking the questions or collecting the blood samples. The questions will take a maximum of 30 minutes of your time.

**8. What about confidentiality?**

All information which is collected about you during the course of the research will be kept on a password protected database and is strictly confidential. Any information about you which leaves the research unit will have your name and address removed so that you cannot be recognized from it.

**9. What will happen if I don't want to carry on with the study?**

You are free to withdraw at any time and without giving a reason. If you decide to withdraw or not join the study, this will not affect the standard of care you receive. We will also be happy to discuss with you what will happen to any data that has been collected up to the point of your withdrawal from the study.

**10. What if there is a problem?**

If a problem arises, you can report it to one of the project staff, your health district head, or the study coordinators at the address given below.

**11. Harm**

The Universities of Brighton and Sussex have insurance in place to cover their legal liabilities in respect of this study.

**12. What will happen to the results of the research study?**

We anticipate that the results of this immediate study will be available next year, and we hope to publish the results. You will not be identifiable in any publication.

**13. Who has approved this study?**

This study has received ethical approval from the Brighton and Sussex Medical School Research Governance and Ethics Committee (BSMS RGEC) and the Cameroon National Ethics Committee (CNEC) and Brighton and Sussex Medical School Research Governance and Ethics Committee (RGEC). Administrative approval was granted by the Ministry of Public Health of Cameroon.

Thank you for taking the time to read this information sheet.




## 1. Community Form


Community form			
SN	Questions and Filters	Response & Coding Categories	Skip
101	Region name		
102	District Name		
103	Health area name		
104	Community name		
105	Community code		
106	Click the 'Record Location' button on the screen of the phone and wait for the GPS coordinates to be recorded.		
107	Total Community Population		
108	Has this community received treatment for LF in the last year?	<input type="checkbox"/> 1 = Yes <input type="checkbox"/> 2 = No	
109	Has this community received deworming treatment in the last year?	<input type="checkbox"/> 1 = Yes <input type="checkbox"/> 2 = No	
Q110	Is this community urban or rural?	<input type="checkbox"/> 1 = Rural <input type="checkbox"/> 2 = Urban	

## 2. Household questionnaire

Q101	Region name	<b>Response &amp; Coding Categories</b>
Q102	District name	
Q103	Community code	
Q104	Household code	
Q105	What type of floor does your house have?	<input type="checkbox"/> 1 = Earth/sand <input type="checkbox"/> 2 = Dung <input type="checkbox"/> 3 = Wood/planks <input type="checkbox"/> 4 = Palm/bamboo <input type="checkbox"/> 5 = Parquet or polished <input type="checkbox"/> 6 = Wood <input type="checkbox"/> 7 = Vinyl or asphalt strips <input type="checkbox"/> 8 = Ceramic tiles <input type="checkbox"/> 9 = Cement <input type="checkbox"/> 10 = Carpet <input type="checkbox"/> 11 = Other
Q106	Source of drinking water?	<input type="checkbox"/> 1 = Pipe-borne <input type="checkbox"/> 2 = River/stream <input type="checkbox"/> 3 = Borehole/well <input type="checkbox"/> 4 = Pond/stagnant
Q107	Where is that water source located?	<input type="checkbox"/> 1 = In own dwelling <input type="checkbox"/> 2 = In own yard/plot <input type="checkbox"/> 3 = Elsewhere
Q108	How long (mins) does it take to go there, get water, and come back?	
Q109	How many adults ( $\geq 15$ years of age) who lived in the current district for at least 10 years reside in this house?	
Q110	Initials of the first person	
Q111	Age	
Q112	Sex	
Q113	Does the person have lymphedema?	
Q114	Initials of the second person	
Q115	Age	
Q116	Sex	
Q117	Does the person have lymphedema?	

### 3. Individual questionnaire for people with lymphedema

Section I Demographic and Socioeconomic Information			
SN	Questions and Filters	Response & Coding Categories	Skip
101	Does the person have lymphedema?	<input type="checkbox"/> 0 = No  <input type="checkbox"/> 1 = Yes (verify by observation)	End
102	Read the barcode for consent		
103	Interviewer Initials		
104	Region name		
105	District name		
107	Community code (01-80)		
108	Household code (Community code_Household number) eg. 01_01		
109	Individual ID (Household ID_ Individual number) eg. 01_01_01)		
110	Sex <input type="checkbox"/> Check box (✓)	<input type="checkbox"/> 1 = Male <input type="checkbox"/> 2 = Female	
111	How old are you?	Age (In years at last birthday >=15)	
112	Religion	<input type="checkbox"/> 1 = Muslim <input type="checkbox"/> 2 = Christian <input type="checkbox"/> 3 = Other	
113	How long you lived in the current location?	Years	
114	What is your major occupation currently? (Whatever you do to earn money)?	<input type="checkbox"/> 1 = Employed <input type="checkbox"/> 2 = Businessman/women <input type="checkbox"/> 3 = Farmer <input type="checkbox"/> 4 = Housewife <input type="checkbox"/> 5 = Daily labourer <input type="checkbox"/> 6 = Student <input type="checkbox"/> 7 = Have no Job <input type="checkbox"/> 8 = Retired <input type="checkbox"/> 9 = Other specify _____	
115	Are you able to read and write in any language?	<input type="checkbox"/> 1 = Yes <input type="checkbox"/> 2 = No	
116	Grade completed	<input type="checkbox"/> 0 = No formal education <input type="checkbox"/> 1 = Primary <input type="checkbox"/> 2 = Secondary <input type="checkbox"/> 3 = Tertiary	
116	What is your current marital status? <input type="checkbox"/> Check box (✓)	<input type="checkbox"/> 1=Single <input type="checkbox"/> 2= Married <input type="checkbox"/> 3 = Divorced <input type="checkbox"/> 4 = Widowed	
Section II Shoe wearing and foot care practice			
201	Have you ever worn shoes?	<input type="checkbox"/> 1 = Yes <input type="checkbox"/> 2 = No 	Go to Q206
202	How old were you when you first got shoes?		
203	Is the person wearing shoes at the time of the interview?	<input type="checkbox"/> 1 = Yes <input type="checkbox"/> 2 = No 	Go to Q205
204	Describe the shoes the person is wearing.	<input type="checkbox"/> 1= Hard plastic <input type="checkbox"/> 2= Open sandal <input type="checkbox"/> 3=Leather <input type="checkbox"/> 4=Canvas <input type="checkbox"/> 5=other	
205	When do you wear shoes? (multiple answers possible)	<input type="checkbox"/> 1= At home <input type="checkbox"/> 2=During rainy season <input type="checkbox"/> 3= On market days	

		<input type="checkbox"/> 4= On the field <input type="checkbox"/> 5= On Sundays <input type="checkbox"/> 6=When walking far	
206	When do you wash your feet?	<input type="checkbox"/> 1=Whenever they are dirty <input type="checkbox"/> 2=Before sleeping <input type="checkbox"/> 3=Before prayer <input type="checkbox"/> 9=Other (specify )_____	
207	How often do you wash your feet very carefully so that they are very clean?	<input type="checkbox"/> 1= More often than once a day <input type="checkbox"/> 2= Daily <input type="checkbox"/> 3=Less often than daily, but more often than weekly <input type="checkbox"/> 4= Weekly or less often	
<b>Section III Leg swelling history and physical examination</b>			
302	Do you have any family member (living or dead) with history of leg swelling?	<input type="checkbox"/> 0 = No  <input type="checkbox"/> 1 = Yes	Go to Q 304
303	How many people in your family (living or dead) have leg swelling?		
304	How old were you when you first noticed this swollen leg?		
305	Where did the swelling start from?	<input type="checkbox"/> 1= From high up <input type="checkbox"/> 2= From the foot or lower leg	
306	Do you have history of rheumatic heart disease?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
307	Do you have swelling in the groin area?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
308	Are you diagnosed as a leprosy patient?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
309	Is there preservation of sensation in the toes? (Physical examination)	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
310	Does the person have any signs and symptoms of onchocerciasis?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
311	Did the swelling start after a major surgical procedure?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
312	Did the swelling start at birth?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	
313	Is the swelling present in both legs?	<input type="checkbox"/> 1 = Both legs <input type="checkbox"/> 2 = One leg	
314	Podoconiosis disease stage	<input type="checkbox"/> 1 = Stage 1 <input type="checkbox"/> 2 = Stage 2 <input type="checkbox"/> 3 = Stage 3 <input type="checkbox"/> 4 = Stage 4 <input type="checkbox"/> 5 = Stage 5	
<b>Section IV Other Morbidities</b>			
401	In addition to the lymphedema in the legs, in which part of the body does the person have lymphedema? (Multiple answers possible)	<input type="checkbox"/> 1= Upper limb <input type="checkbox"/> 2= Breast <input type="checkbox"/> 3= Vulva/Penis <input type="checkbox"/> 4= Hydrocele	
402	Does the person have Chyluria (Milky Urine)?	<input type="checkbox"/> 0 = No <input type="checkbox"/> 1 = Yes	

The end!

Thank you for giving us your time and answers to many questions. We hope this will help the work in the future.

#### 4. Parasitology

	Read the barcode for test results		
Q101	Presence of <i>W. bancrofti</i> TBF Day	Yes, No	If No go to Q103
Q102	<i>W. bancrofti</i> TBF day count	Number	
Q103	Presence of <i>L. loa</i> TBF day	Yes, No	If No go to Q105
Q104	<i>L. loa</i> TBF day count	Number	
Q105	Presence <i>M. perstans</i> TBF day	Yes, No	If No go to Q107
Q106	<i>M. perstans</i> TBFday count	Number	
Q107	Presence of <i>W. bancrofti</i> TBF night	Yes, No	If No go to Q109
Q108	<i>W. bancrofti</i> TBF night count	Number	
Q109	Presence of <i>L. loa</i> TBF night	Yes, No	If No go to Q111
Q110	<i>L. loa</i> TBF night count	Number	
Q111	Presence <i>M. perstans</i> TBF night	Yes, No	If No go to Q113
Q112	<i>M. perstans</i> TBF night count	Number	
Q113	QPCR Night <i>W. bancrofti</i>	Negative ,Positive	

#### 5. RDT results

Read the barcode for test results	
Record taker's initials	
FTS Results	<ol style="list-style-type: none"> <li>1. Negative</li> <li>2. Positive</li> <li>3. Indeterminate</li> </ol>
Wb123 test Results	<ol style="list-style-type: none"> <li>1. Negative</li> <li>2. Positive</li> <li>3. Indeterminate</li> </ol>