

# Report on Trachoma mapping in Malawi July 2015

## Background of trachoma in the country

The Trachoma Control Programme was launched in Malawi 2011 to implement the SAFE strategy through the Government and sponsored by a consortium of non-governmental organisations, which are members of the International Coalition for Trachoma Control (ICTC).

The Ministry of Health and supporting partners are committed to reach the targets of GET2020 in Malawi.

## Summary of available trachoma prevalence data

Malawi has a total of 28 districts. Until 2011 Malawi did not have a written plan to eliminate blinding trachoma in the country. As part of the SAFE strategy implementation, the first mass drug administration with Zithromax commenced in 2011 in the first 2 districts mapped in 2008 (the only ones mapped at that point). Three (3) more districts were mapped in 2012, but only 2 were found to be endemic. The Global Trachoma Mapping Project (GTMP) funded by DFID through Sightsavers led to 18 new districts being mapped in 2013 by the Ministry of Health, assisted by the Blantyre Institute for Community Ophthalmology (BICO). This meant 23 out of 28 had been originally mapped, with 5 non suspected districts remaining. Among the 5, 2 districts (Mulanje and Dedza) which were originally believed not to have endemic trachoma, had new data that suggested trachoma may have been a problem in that area. It was in view of this that mapping for these was planned and conducted between February and June 2015.

## Demography of the districts mapped

The 2 districts are Mulanje district (population 612,699) in Southern Malawi and Dedza district (population 727,396) in Central Malawi. Each district was treated as an evaluation unit for the purpose of the mapping.

## Methodology

The objective was to determine using the GTMP methodology, the prevalence of trachoma and associated risk factors in each of the districts. The results will guide the Malawi Ministry of Health (MOH) as to whether there is a need for a trachoma program in these districts. The mapping was be a cross-sectional population-based survey designed to obtain district level prevalence estimates for trachomatous inflammation: follicular (TF) in children aged 1-9 years; and trachomatous trichiasis (TT) in persons aged 15 years and above.

The Global Trachoma Mapping Project (GTMP) is a standardised trachoma mapping methodology that has been endorsed by the WHO and the International Coalition for Trachoma Control, and has currently been used in over 20 countries. The GTMP sample size for each evaluation unit is 1,019 1-9 year-olds. To achieve this sample size in the Malawi context, 24 clusters of 40 households each were be selected and sampled from each evaluation unit. All residents of selected households aged 1 year or more will be invited to participate.

## Description of all activities undertaken

### Pre-survey district visits

These started from February 2015 and involved meetings with district health management teams and field visits to different sites within districts. The purpose of these was to orient the districts to the upcoming surveys, and obtain data that could be used for sampling the clusters. On average two visits were undertaken before finalizing the survey plans. Meeting involved the district health environmental officer, the ophthalmic clinical officer and the district health officer. Additionally meetings were arranged with the National Eye coordinator at the Ministry of Health.

### Selection of clusters

This was done after all the data was collected from the districts. The clusters were villages with a population of atleast 1000 residents. once selected , the health surveillance assistant (HSAs) from that area was contacted to generate a household list, and send it to BICO offices in Blantyre.

### Selection of training sites

This involved travelling between March and April 2015 to districts/areas suspected of having active trachoma cases and confirming that cases were indeed there. Two certified graders (ophthalmic clinical officers) were sent to two respective districts (Mangochi and Machinga) to identify atleast 40 active trachoma cases. Machinga did not have enough cases in comparison to Mangochi so Mangochi district was prioritised as a training area. Names of children found to have active trachoma cases were kept safely to be used for training.

### Selection of Grader trainers, enumerators and Verification of survey dates

Once the area where the training was going to take place was confirmed, and all information from districts were received , clusters selected and household listed, proposed dates were confirmed with the districts. In liason with the National Eye care coordinator, certified graders (ophthalmic clinical officer) and recorders were invited for the refresher course. Dates for the Malawi survey were planned from 24<sup>th</sup> May till 9<sup>th</sup> June. Communities in Mulanje and Dedza were sensitized about the planned dates and informed to stay home on those dates.

### Refresher training

Refresher Training was conducted from 25<sup>th</sup> May 2015 in two days by four trainers:  
Dr Khumbo Kalua-Master GTMP Global trainer  
Dr Vincent Moyo-Ophthalmologist and local Trainer  
Frank Mbewe- Cataract Surgeon and Local Trainer  
Alvin Chisambi- BICO Data Manager- Recorder Trainer

In addition, the National Eye Coordinator from Ministry of Health (MOH representative) was available to guide on overall policy issues and offer supervision

Each group of graders and recorders were initially trained separately on first day (graders focused on eye examination to grade trachoma, while recorders focused on how to capture data on the android smartphone). The second day (May 26) was spent training the groups together on the study methodology and the roles for each person, through classroom and field practice, while the team worked in pairs (grader and recorder).

The grader/recorder training sessions included 12 Ophthalmic Clinical Officers (OCOs) from the MOH, 10 recorders and 11 drivers

### Field work

Upon completeion of refresher training, teams travel from mangochi to Dedza district. Field work started in Dedza districts followed by mulanje district. A complete team has a grader, recorder, a health surveillance assistant and a volunteer. Each selected village was visited a few days in advance of the survey by a community health worker (Health Surveillance Assistant) from the MOH; their purpose was to brief the village chief and the community members, and organize the village household (HH) list to be used for random HH selection by the survey team. Upon arrival in the village, the survey team used a random selection of HH. Then, after obtaining consent from the household head, Global Positioning System (GPS) and Water, Sanitation, and Hygiene (WASH) data was collected, and household members were counted and examined for signs of trachoma. Individuals found to have active trachoma were treated with 1% tetracycline eye ointment and adults with TT were referred to the district hospital.

The teams were supervised by 2 supervisors, with each supervisor spending one day of every 4 days with each team.

## A timeline of all activities undertaken in association with the mapping

	March	April	May	June	July
Seek MOH approval and nominate the secretariat for data	X				
Receive implementation budget in country	X				
Pre-survey districts visits		X			
Procure survey logistics		X			
Identify and recruit survey teams			X		
Training preparation including invitation letter to trainees			X		
Stakeholder meetings(MOH/BICO)	X	X	X		
Identify field work vehicles			X	X	
Conduct refresher training of graders and recorders			X	X	
Sensitisation of community			X	X	
Conduct field work				X	
Data cleaning and analysis				X	
Final report					X

### Data management

Data captured on the android phone during survey was uploaded onto a links server (based in Atlanta, Georgia, USA) and analysed by the GTMP data manager in liason with the epidemiologist (Dr KK)

### Results

A list of officers involved in the survey is shown below. This does not include list of HSAs and district staff.

<b>TRAINERS</b>		<b>DRIVERS</b>	
1	DR VINCENT MOYO	1	J.NYIRENDA
2	FRANK MBEWE	2	P.D.PHIRI
3	KHUMBO KALUA	3	MR MAONGA
4	ALVIN CHISAMBI	4	A.MAFUNGA
	MINISTRY OF HEALTH	5	L.BALE
	MICHAEL MASIKA	6	L.CHINULA
		7	BRAZIO BANDA
	<b>GRADERS</b>	8	R.SINGANO
1	VOLINE CHIZIWE	9	Chester Phiri
2	THANDIE BANDA	10	MR CHIKUNDI
3	FRANK MBEWE	11	MR MOPHO JERE
4	MR HENDRIX LIKONGWE	12	MR MPATA
5	MAGGIE SENZAMANJA)		
6	JOSSEIN CHIZALA		MINISTRY OF HEALTH
7	MADALITSO NYANGULU	1	MICHAEL MASIKA
8	ISAAC LUHANGA		
9	MR JUTA		
10	ELIYA PHIRI		
11	GEORGE MPHASA		

<b>RECORDERS</b>			
1	GOMEZGANI NYASULU		
2	LESLEY MULAGA		
3	MADALITSO JAMALI		
4	EMILY LUNGU		
5	PATRICK CHASAUKA		
6	SLYVIAH ZULU		
7	JESICA SPINALA		
8	CHIKONDI CHIKOTI CHALERA		
9	SALOMIE BALAKASI		

**Clinical results not yet out**

Number of children examined:

TF and TT findings

## **Acknowledgements**

Many thanks to:

- Ministry of Health headquarters for arranging the survey vehicles and the drivers, and for releasing the graders during the survey
- The officials of the Ministry of Health from Mulanje and Dedza districts for their cooperation during the survey
- BICO staff for facilitating the training.
- Sightsavers for logistical preparation and USAID for funding the survey through RTI/Sightsavers .

Reported by Dr Khumbo Kalua on behalf of all staff of BICO and on behalf of Ministry of Health Malawi