GSA

GLOBAL SCHISTOSOMIASIS ALLIANCE

COR NTD

Elimination of Schistosomiasis as a Public Health Problem.

Experiences on reaching the goal and what to do next from endemic countries.

Dr Pauline Mwinzi

Mr Lazarus Juziwelo

Mr Fikre Seife

Mr Dennis Kailembo

Prof Charlie King

Speakers in COR-NTD pre-meeting

"Elimination of Schistosomiasis as a Public Health Problem. Experiences on reaching the goal and what to do next from endemic countries."

7th October 2020

Session Flow

Part 1: Talks (60 min):

1. Welcome and overview (Upendo Mwingira, Chelsea Toledo – 5 min)
2. Pauline Mwinzi: SCH 2030 Roadmap indicators and regional progress, (WHO/ESPEN) (10 min)
3. Lazarus Juziwelo: Reaching, maintaining, and going beyond the EPHP goal for Schistosomiasis in Malawi (10 min)
4. Fikre Seife: Reaching, maintaining, and going beyond the EPHP goal for Schistosomiasis in Ethiopia (10 min)
5. Denis Kailembo: Reaching, maintaining, and going beyond the EPHP goal for Schistosomiasis in Tanzania (10 min)
6. Charlie King – Challenges of using intensity of infection as a measurement of EPHP (10min)
7. Q&A (5 min)

Session Flow

Part 2: Parallel break-out discussions (40 min):

- **Group A** - What is EPHP and what do you do once you have achieved the target (as it is currently defined)? What are the OR questions that need to be addressed?

- **Group B** – What intervention strategies are required for communities where EPHP (as it is currently defined) has not been achieved? What are the OR questions that need to be addressed?

Part 3: Final Plenary (20 min):

- Breakout groups re-join
- Chairs and rapporteurs report key findings
- Final discussion

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Control and Elimination of SCH in the Africa Region: Goals, targets and measurement of impact

Pauline Mwinzi
ESPEN

World Health Organization
Africa

Schistosomiasis Control and elimination: Goals and Targets

Schistosomiasis Strategic plan 2011-2020

Vision	A World free of schistosomiasis
Goals	To control Morbidity due to SCH by 2020 To eliminate SCH as a public health problem by 2025 To interrupt transmission of SCH in the EMR,SEAR, WPR and selected countries of the AFR by 2025
Objectives	To scale up control and elimination activities in all endemic countries To ensure an adequate supply of PZQ and resources to meet the demand

Schistosomiasis Control and elimination: Goals and Targets

Schistosomiasis Strategic plan 2011-2020

- ***Treat at least 75% of school aged children in all endemic countries***

- *Control of morbidity (defined as reduction to <5% the prevalence of high intensity infections)*

- *Regional elimination as public health problem (defined as reduction to <1% the prevalence of high intensity infections) in selected countries in Africa by 2020*

ESPEN

Suggested indicators

Table 3. Possible indicators for monitoring preventive chemotherapy interventions

Lymphatic filariasis	Onchocerciasis	Schistosomiasis	Soil-transmitted helminthiasis
Prevalence of microfilaraemia	Prevalence of onchocercal nodules	Prevalence of infection (by parasitological methods)	Prevalence of any infection (by parasitological methods)
Prevalence of antigenaemia	Prevalence of microfiladermia (skin snip test)	Intensity of infection (proportion of heavy-intensity infections)	Intensity of infection (proportion of heavy-intensity infections)
Prevalence of hydrocele		Prevalence of macrohaematuria	Prevalence of anaemia
Prevalence of lymphoedema		Prevalence of microhaematuria	
Incidence of acute attacks (adenolymphangitis)		Prevalence of anaemia	
Incidence of infection subsequent to MDA		Prevalence of ultrasound-detectable lesions (urinary tract and liver)	

Source: Preventive chemotherapy for human helminthiasis

Indicators and procedures for measuring morbidity reduction in the context of a control programme - WHO 2018 Manual

Table 2. Recommended primary indicators of morbidity in schistosomiasis and soil-transmitted helminthiasis control programmes

Infection	Primary indicator	Sample	Laboratory method	Timing	Frequency
Urogenital Schistosomiasis	Proportion of heavy intensity infections	Sentinel and spot-check sites	Urine filtration (single specimen; single slide)	Immediately before next preventive chemotherapy campaign and at least 6 months after mass drug administration	At baseline and at least every 5 years for evaluation More frequently for monitoring of sentinel sites
Intestinal Schistosomiasis	Proportion of heavy intensity infections		Kato–Katz (single specimen; single slide)		
Soil transmitted helminthiasis	Proportion of moderate or heavy intensity infections of any soil-transmitted helminth				

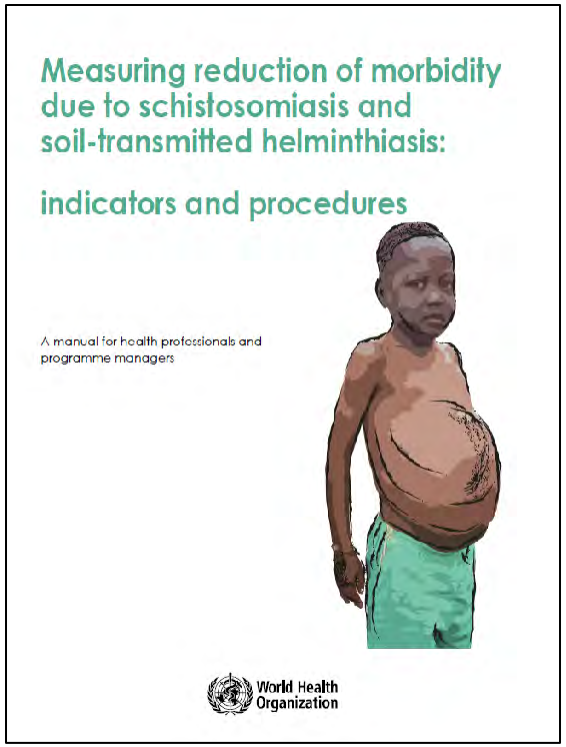

Table 7: recommended additional indicators of morbidity in SCH control programmes

Prevalence		
Urogenital SCH	Presence of blood in urine	Visual examination/reagent strips
	Lesions in urinary tract	Ultrasound
	Assessment of signs and symptoms	Structured questionaire
	Genital Manifestations of SCH	Clinical examination, colposcopy, ultrasound of pelvic organs
Intestinal SCH	Blood in stool (including persistent bloody diarrhea)	Visual examination/reagent strips
	Circulating Cathodic Antigen	Reagent strips
	Lesions in liver, spleen and portal veins, presence of ascites	Ultrasound

Table 7: recommended additional indicators of morbidity in SCH control programmes

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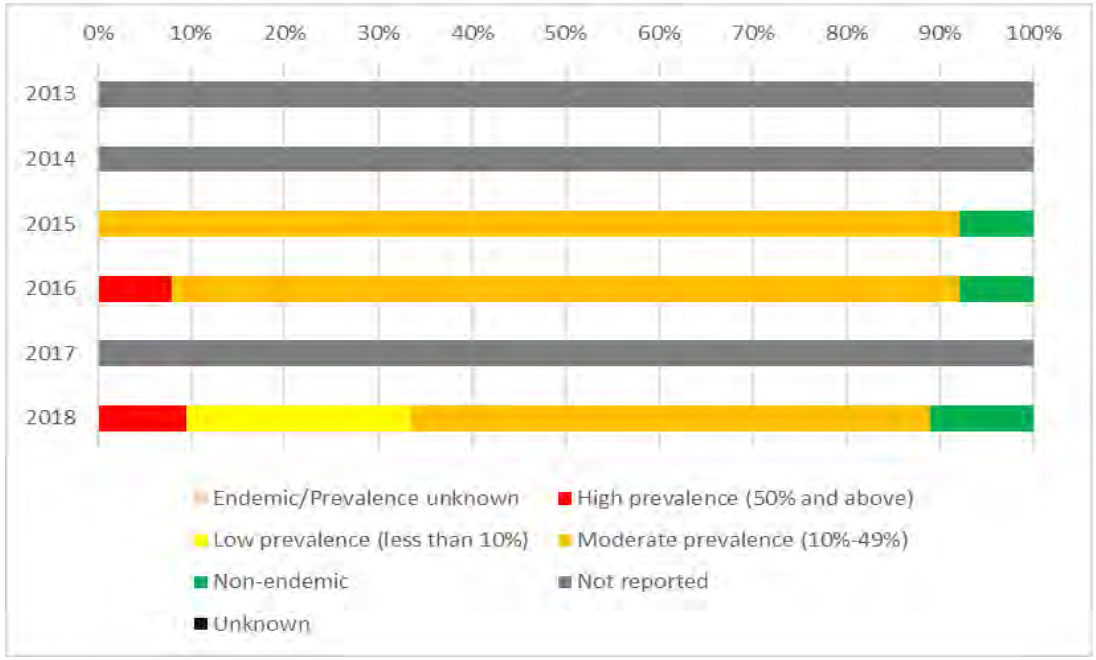
ESPEN Goal 2020: 100% Geographical coverage

MDA not started	MDA started but not at scale or irregular	MDA scaled to all endemic IUs	Need re-assessment of the situation
Equatorial Guinea, Botswana, South Africa	Angola, Congo, Nigeria, Somalia, Central African Republic, Chad, Gabon, Guinea-Bissau, Sao Tome and Principe, South Sudan, Zambia, Namibia.	Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Senegal, Sierra Leone, Sudan, Swaziland, Togo, United Republic of Tanzania, Uganda, Zimbabwe	Algeria Need validation of elimination as PHP Mauritius
3	12	28	2

2019/20 Focus countries for 100% GC

Zimbabwe



Coverage (75% target)

- A total of 69.1 million SAC were treated, representing a coverage of **62.9%.**

- In 2018, **20** of the 34 countries that implemented PC for schistosomiasis achieved **≥75%** national coverage for SAC

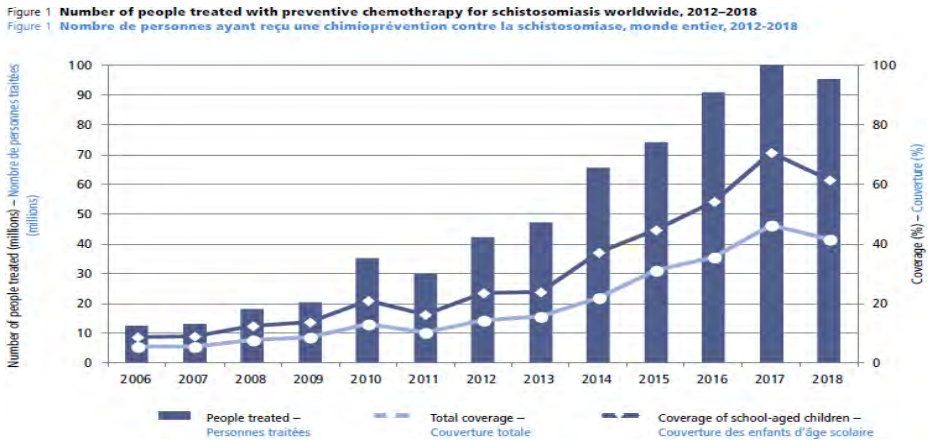
- **88.1%** (1424/1617) of implementation units achieved effective coverage for ≥75% for this age group.

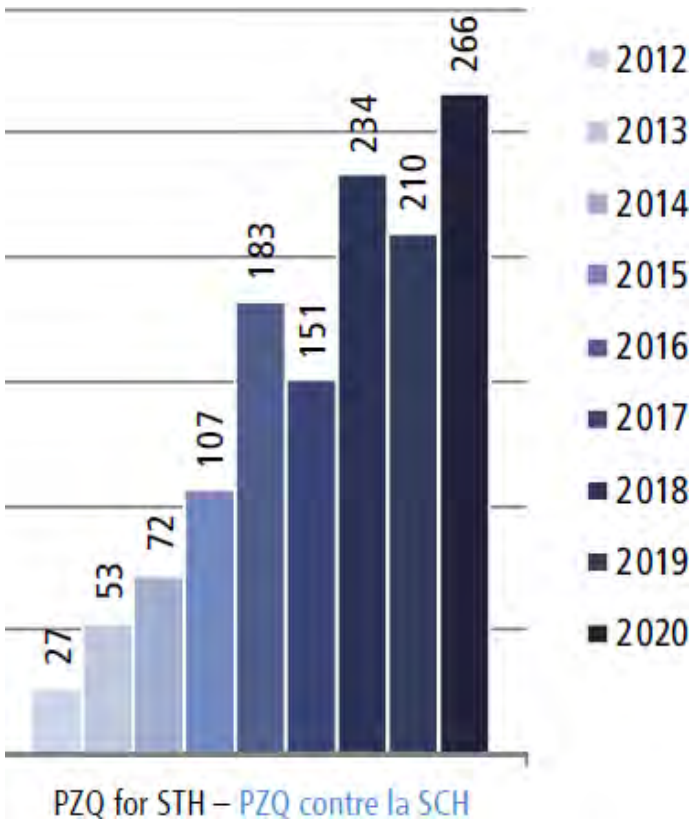
Coverage (75% target) 2018

Countries implemented PC for SAC in 2018 with >75% national coverage	**Benin, Burkina Faso, Burundi, Côte d'Ivoire, Ethiopia, Eswatini, Gabon, Ghana, Guinea, Guinea- Bissau, Liberia, Malawi, Mali, Mauritania, Niger, Sao Tome and Principe, Sudan, Togo, United Republic of Tanzania**
Countries implemented PC for SAC in 2018 with <75% national coverage	Angola, Benin, Cameroon, Central African Republic, Chad, Gabon, Guinea-Bissau, Liberia, Niger, Senegal, Sierra Leone, Sudan*, Togo, Yemen*, Zambia
Countries not implemented PC or not reported for SAC in 2018	Botswana, Comoros, Congo, Djibouti*, Equatorial Guinea, Gambia, Kenya, Madagascar, Namibia, Somalia,* South Africa, South Sudan, Zimbabwe

Progress towards 2020 targets

Despite the substantial progress that has been made since 2010, not all the targets set for 2020 in the earlier road map will be met





World Health Organization

NTD Roadmap 2030

Disease	Indicator	2020	20203	2025	2030
Targeted for Elimination as a public health problem					
SCH	Number of countries validated for elimination as a public health problem (currently defined as <1% of heavy intensity infections)	26 (33%)	49 (63%)	69 (88%)	78 (100%)

- **3rd generation NTD country masterplans –Ongoing**
- **Upcoming operational guidance documents:**
  - **Sustainability Framework**
  - **M&E framework**

Thank you for your attention!

For an Africa free of NTDs

EXPANDED SPECIAL PROJECT
FOR ELIMINATION OF
NEGLECTED TROPICAL DISEASES

World Health Organization
REGIONAL OFFICE FOR Africa

Dr Pauline Mwinzi

Mr Lazarus Juziwelo

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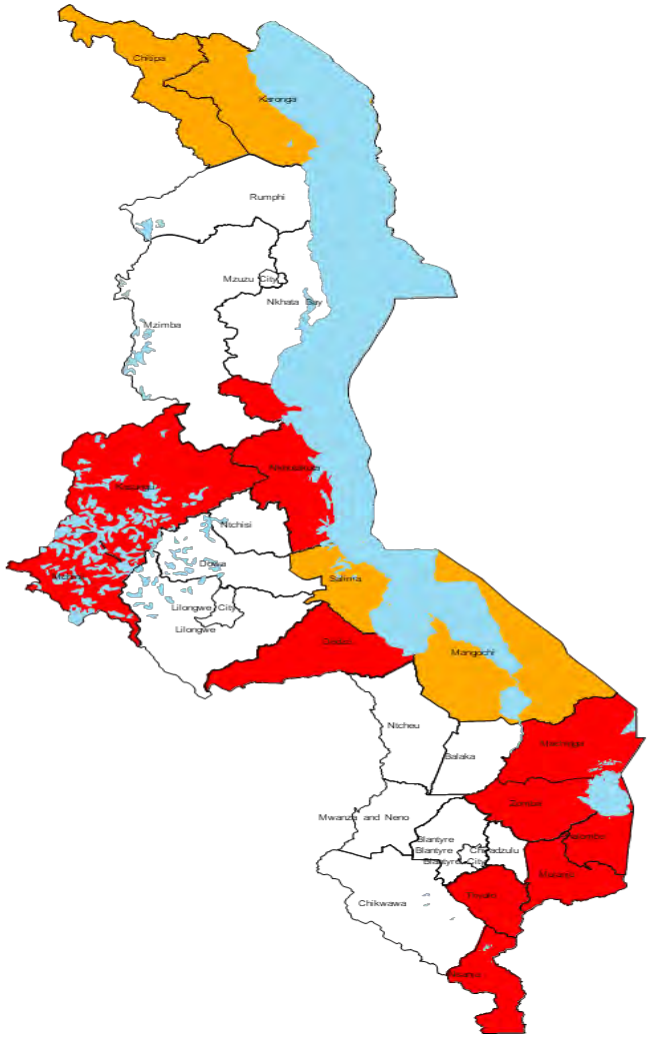
7th October 2020

Elimination of Schistosomiasis Morbidity – Experiences on reaching the goal and what to do next from endemic countries

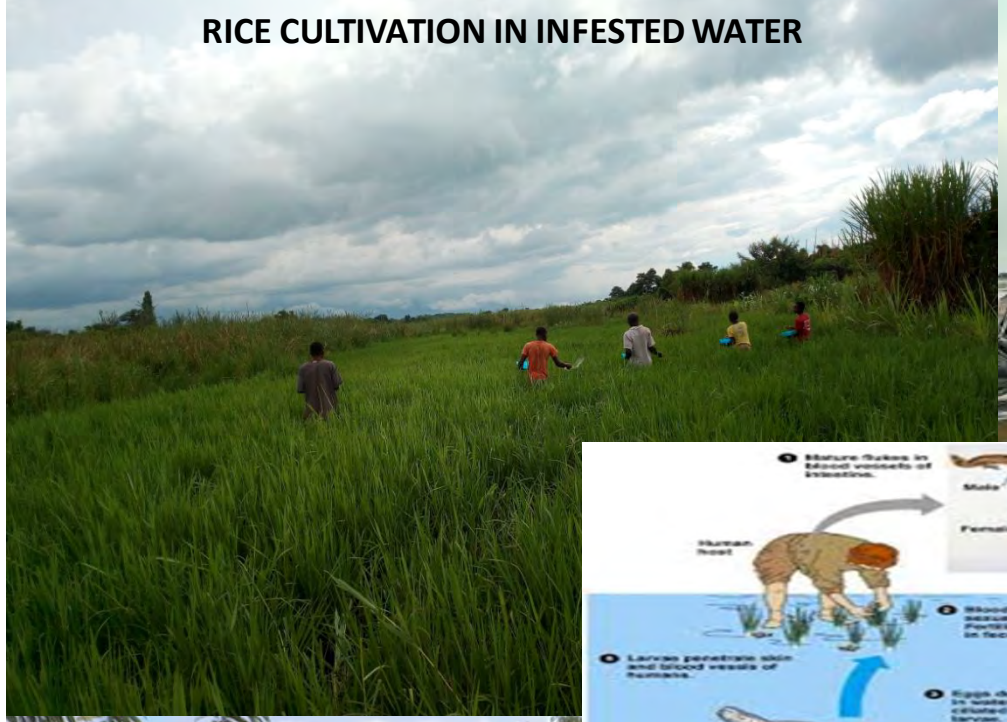
Lazarus Juziwelo

National Program Manager for
Schistosomiasis and STH Control Program

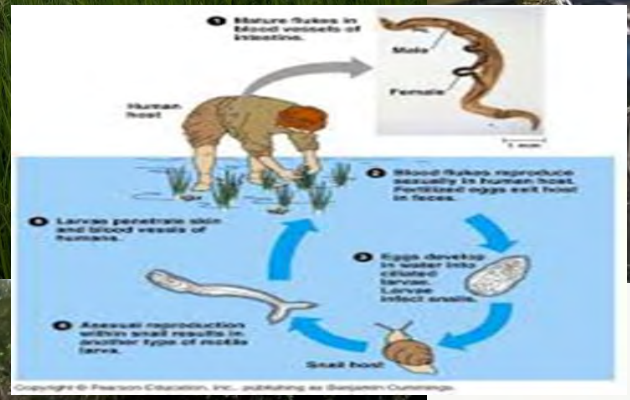
Malawi



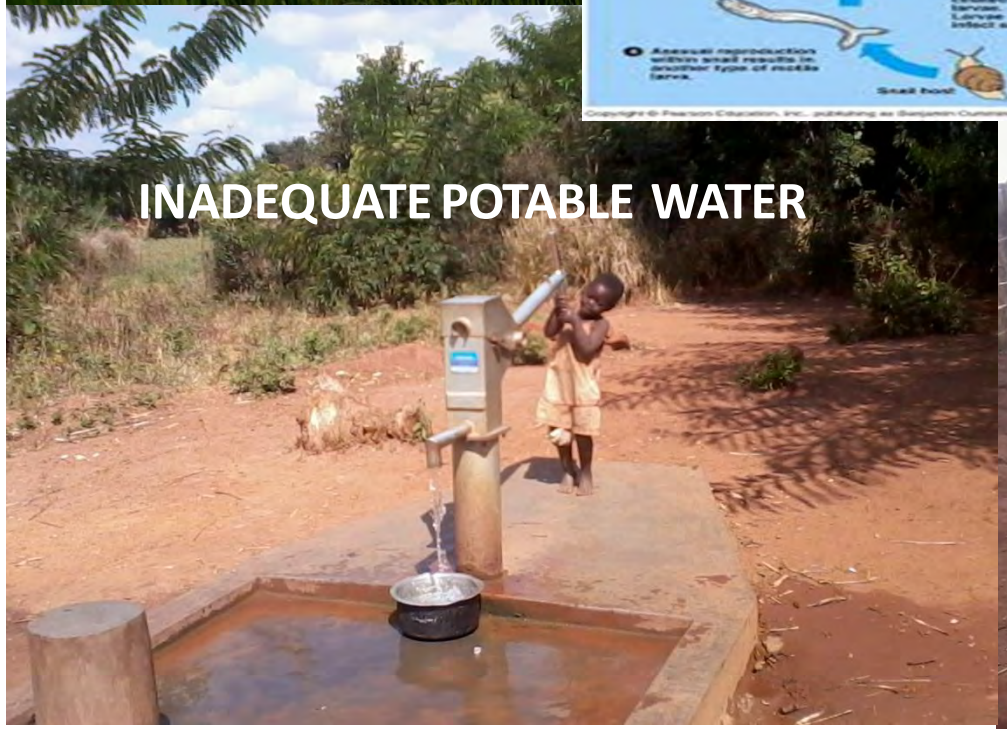
RICE CULTIVATION IN INFESTED WATER



FISHING IN INFECTED WATER = MORE REINFECTION



INADEQUATE POTABLE WATER

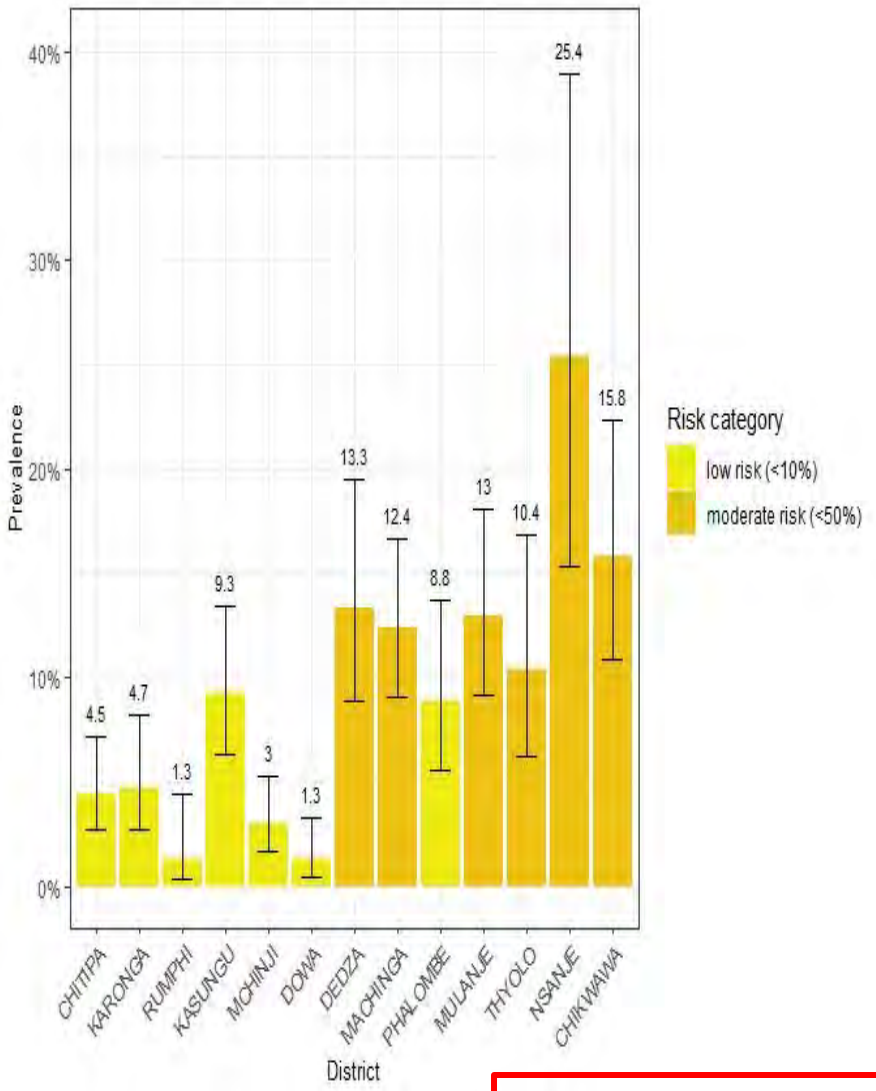


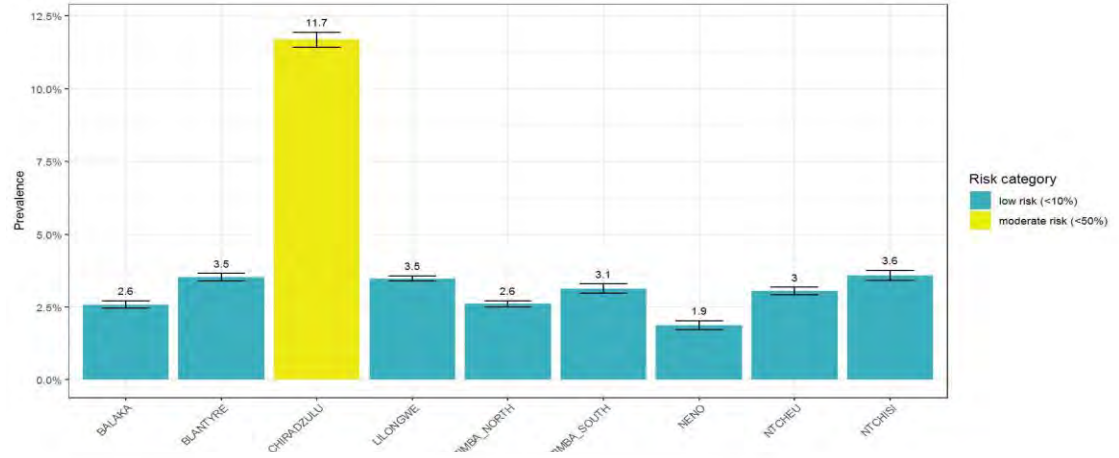
Introduction

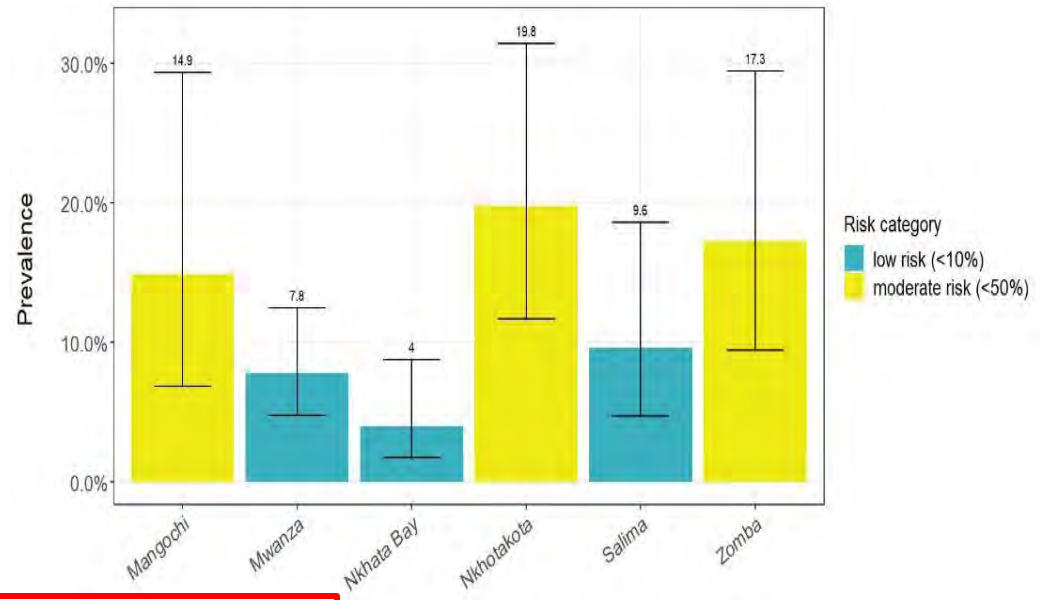
- Prior to MDA with Praziquantel in 2008, 2009 and 2010, baseline surveys for *S. haematobium* showed the prevalence ranged from 10% to 59.5% (in Mzimba and Mulanje respectively) using WHO guidelines on sampling and microscopy techniques

- **Reassessment mapping (2017 to 2019) shows 18 districts at low prevalence (>1% & <10%) and 10 districts at moderate (>10% & <50%) and 1 district with <1%**

Any SCH reassessment mapping (2017-2019) Prevalence results



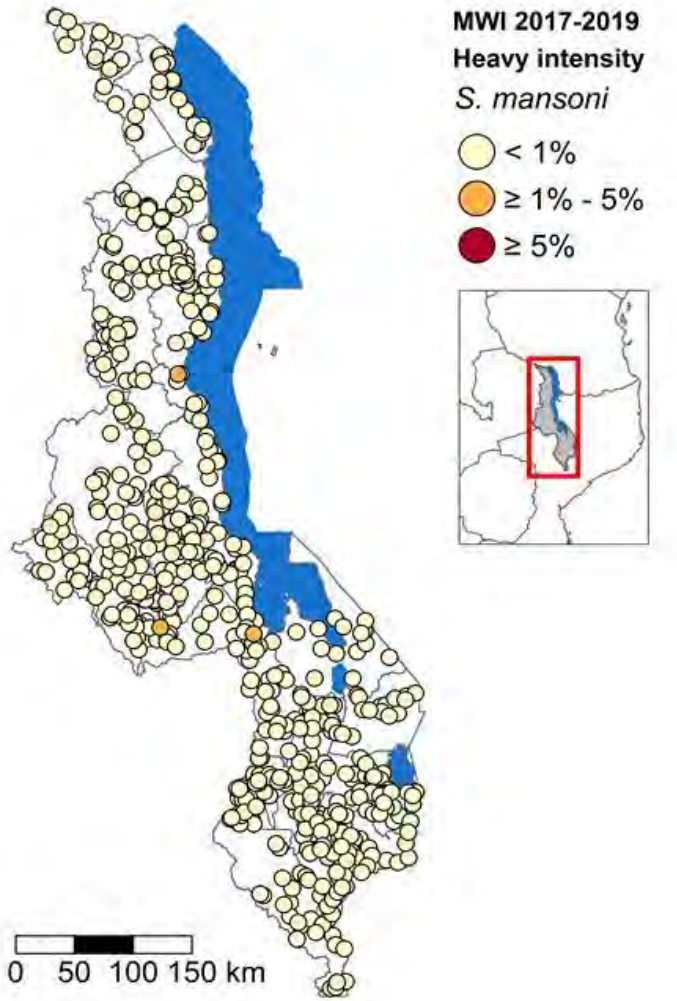




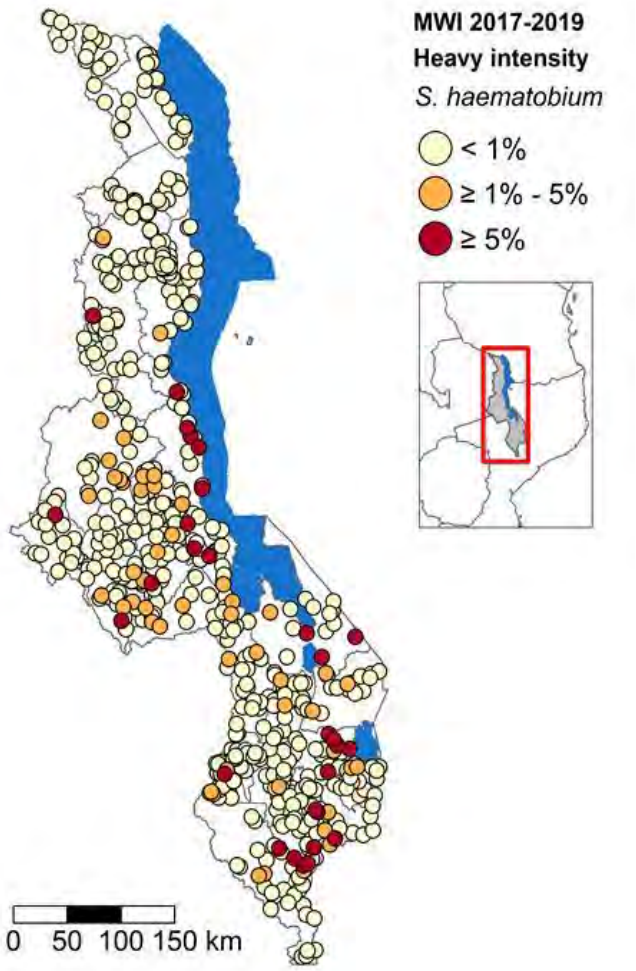
No high risk by prevalence following 5 years of treatment

SCH reassessment mapping (2017-2019) prevalence of heavy intensity results

S. mansoni



S. haematobium



- Reassessment surveys conducted (2017-19) following 5 rounds treatment
- Maps illustrates the schools which were above and below the EPHP threshold after 5 rounds of treatment for both species.
- The majority of schools are below the EPHP threshold for *S. mansoni*.
- For *S. haematobium* there are schools still above the EPHP threshold and also above the Control of Morbidity threshold.

	S. mansoni			*S. haematobium*		
Overall Prevalence	Prevalence of heavy intensity			Prevalence of heavy intensity		
	< 1%	**>= 1%**		**< 1%**	**>= 1%**	
< 10%	465 (97%)	2 (>1%)	467 (98%)	444 (74%)	26 (4%)	470 (79%)
>= 10%	10 (2%)	1 (>1%)	11 (2%)	80 (13%)	47 (8%)	127 (21%)
	475 (99%)	3 (1%)	478 (100%)	524 (88%)	73 (12%)	597 (100%)

S. mansoni

- Following 5 rounds of treatment most schools (97%) are below 10% prevalence and below the threshold for EPHP of <1% prevalence of heavy intensity
- Baseline data (not shown) indicated low levels of *S. mansoni* infection in Malawi

S. haematobium

- Following 5 rounds of treatment ¾ of schools (74%) are below 10% prevalence and below the threshold for EPHP of <1% prevalence of heavy intensity
- However, 13% of the total schools are below the EPHP threshold but above the 10% threshold meaning that frequency of treatment cannot be reduced.
- And 12% of schools are above the EPHP threshold with some being below and above the 10% prevalence threshold that determines treatment strategy

Effort for Malawi to reach, maintain and go beyond EPHP goals for schistosomiasis

- Precision mapping done at district level (base line)
- Preventive chemotherapy generalized (country wide)
- Reassessment mapping done 2017 to 2019
- Wash interventions including open defecation Free initiative (Community Lead Total sanitation) and subsidized water and sanitation support
- Operation research with an aim of Knowledge Transformation approach

Long term goal			
Long term goals	**Indicator**	**Sub-indicator**	**Data source**
To transform Malawi into a nation free from SCH by 2030	Prevalence at 0% (No transmission)	MDA coverage at 100% (therapeutic) Geographical coverage at 100%	Transmission assessment surveys (epidemiological and malacological)

Medium-term goal			
Medium term goal	**Indicator**	**Sub-indicator**	**Data source**
To reduce burden of schistosomiasis to a level of no public health importance in Malawi by 2025	Prevalence of schisto infection at <1% Prevalence of bladder masses/cancers at <1%	MDA coverage at >80% (therapeutic) Geographical coverage at 100% Intensity of heavy infections <1%	Coverage surveys and MDA reports Prevalence surveys Routine HMIS/DHIS 2 Hospital reports Case study reports

Short-term goals			
Short term goals	**Indicator**	**Sub-indicator**	**Data source**
To integrate schistosomiasis control interventions into other existing public health programmes	Number of partners/programmes involved in schisto interventions e.g. water department, WASH, veterinary department Ministry of Education	Percentage of participation >80%	Programme reports Health centres reports
To increase the number of partners involved in schistosomiasis control activities	Number of one health meetings held with partners on schisto control program.	Percentage of participation >80%	Programme / health centres reports

Short term goals	Indicator	Sub-indicator	Data source
To enhance the visibility of schistosomiasis as a public health problem through advocacy activities	Number of trainings done and outreach activities	Number of IEC activities done	Programme reports IEC materials
To promote use of evidence based informed programmatic decision making through local operational/ implementation research	Number of research disseminated	Number of research recommendations contributed to policy formulation	Publications Policy briefs Blogs

Plans from 2021 and beyond

- **Mapping**: Shrinking of PC to lower implementation unit (IU) – precision mapping to lower Ius
- **Diagnostics**: Change the diagnostic tools from filtration and kato katz to more sensitive tools like PCR
- **Continue EPHP**: Continue morbidity control to districts with >5% prevalence
- **Transition to Interruption of Transmission**: Target low prevalence districts for elimination of public health problem to interrupt transmission
- **Surveillance systems**: Intensify surveillance system on sentinel sites in hot spot areas
- **Case management**: Intensify case management and link with NCDs program on complicated cases
- **Behavior Change communication**: Intensify knowledge transformation for behavior change communication

Challenges

- More than 20% Malawians live along water bodies (more susceptible to re-infection)
- Low sanitary coverage (disasters affects WASH coverages)
- Socio-economic activities e.g. fishing, irrigation (Greenbelt Initiative)
- **Inadequate portable water (**Domestic activities leads to infected water)
- Tourism along the lake (now common with nationals)
- Inadequate linkages with other programs e.g. WASH, NCDs, STI etc
- Inadequate BCC strategy
- **NO VECTOR CONTROL**
- Donor conditionality e.g. focalization of funding rather than health systems strengthening (most donations are for PCT)
- Diagnostic tools used not sensitive

Research Question

- Which diagnostic tools will be used to upgrade approach from morbidity control to Elimination as a Public Health problem to Elimination for transmission to Eradication?

- What are health system strengthen required to fast track elimination processes?

- What are monitoring and evaluation technics required to upgrading from one stage to another?

THANK YOU VERY MUCH
FOR YOUR TIME

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Mr Lazarus Juziwelo

Mr Fikre Seife

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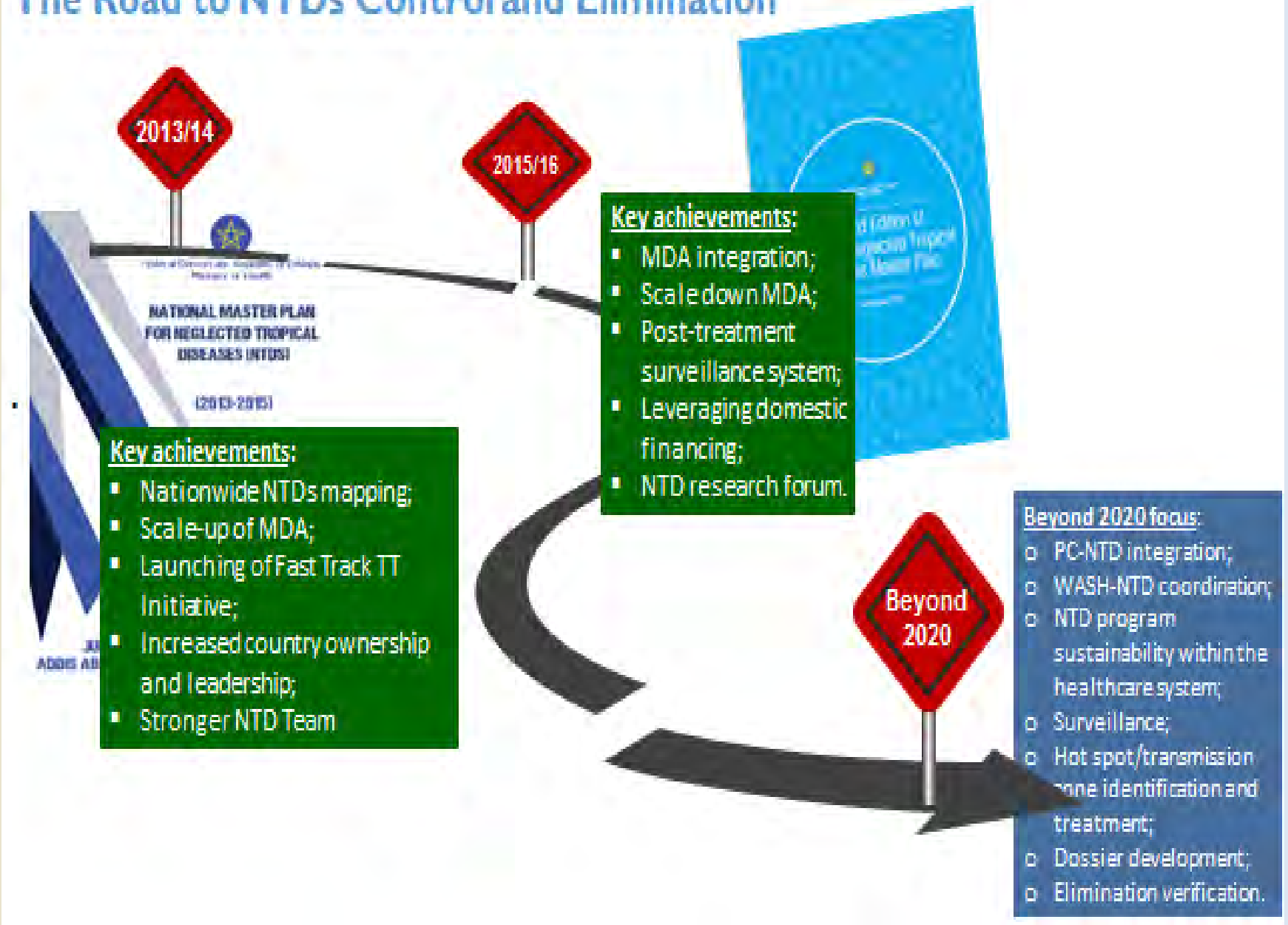
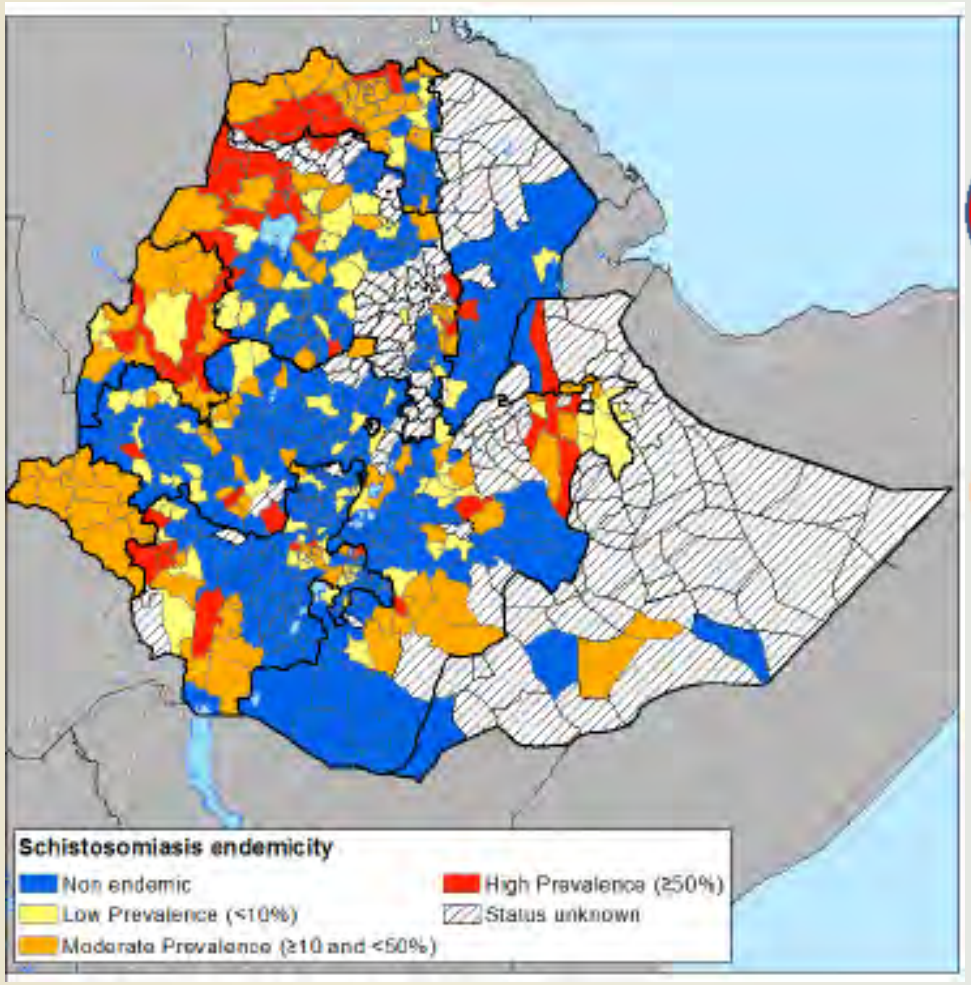
MINISTRY OF HEALTH-ETHIOPIA
የዜጎች ጤና ለሃገር ብልጽግና!
HEALTHIER CITIZENS FOR PROSPEROUS NATION!

Reaching, maintaining and going beyond the EPHP goal for Schistosomiasis in Ethiopia

The Road to NTDs Control and Elimination



SCH endemicity in Ethiopia

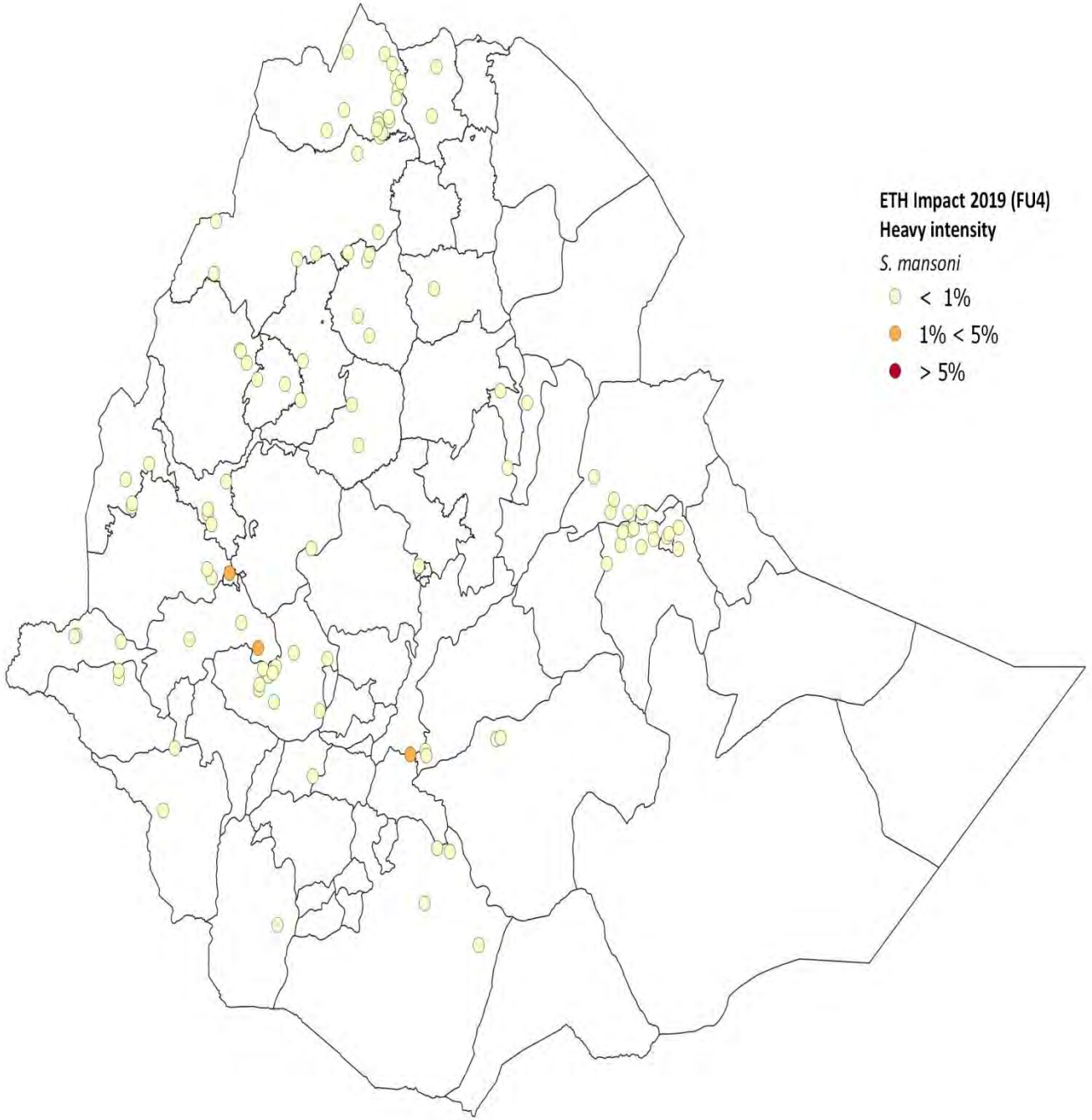


High	70
Moderate	153
Low	190

Population at risk = 38.3 million

14.61 million school-age children require treatment against SCH

SCH treatment trends over years


ETH Impact 2019 (FU4)
Heavy intensity
S. mansoni
< 1%
1% < 5%
> 5%

…cont'd

	S. mansoni BASELINE			*S. mansoni* FOLLOW-UP 4		
Overall Prevalence	Prevalence of heavy intensity			Prevalence of heavy intensity		
	< 1%	**>= 1%**		**< 1%**	**>= 1%**	
< 10%	91 (86%)	2 (2%)	93 (88%)	84 (79%)	1 (1%)	85 (80%)
>= 10%	8 (8%)	5 (5%)	13 (12%)	19 (18%)	2 (2%)	21 (20%)
	99 (93%)	7 (7%)	106	103 (97%)	3 (3%)	106

S. mansoni

- At baseline most (86%) sentinel sites are below 10% prevalence and below the threshold for EPHP of <1% prevalence of heavy intensity
- Following 5 rounds of treatment there is an increase in sites with less that have achieved the EPHP threshold of 1% prevalence of heavy intensity BUT an increase in sites above 10% prevalence.
- This indicates that following treatment there is not a clear relationship between prevalence and intensity of infection.

S. haematobium

- All schools less than 10% prevalence and 1% prevalence of heavy infections at baseline and FU1

2025 targets

Indicator	2023	2025
Prevalence of SCH	Proportion of IU to have <2% prevalence (Kato Katz)	Increased proportion of IU to have <2% prevalence (Kato Katz)
Prevalence of heavy infection of sch	Maintain <1% prevalence heavy infections in all IU (KK)	Then <2% prevalence using qPCR in selected sentinel sites Maintain <1% prevalence heavy infections (KK) in all IU

Actions to achieve the target

- Shrinking the map-sub district level mapping for Schistosomiasis-informing implementation of schistosomiasis control at community level
- Expanded MDA- treatment including adults
- WaSH NTD integration- Strong intersectorial collaboration
- BCC and community engagement- strengthen the work on behavioral change and communication by identifying key behaviors

Program challenge

- Security problem in some of districts
- Split of districts due to political reason
- Community resistance to take PZQ specially in towns

END

Thank you!

Dr Pauline Mwinzi

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7th October 2020

Reaching, maintaining and going beyond the EPHP (Elimination of Public Health Problem) goal for Schistosomiasis (SCH) in Tanzania

Dr. Denis Kailembo – MERLA Advisor (NTDCP / IMA World Health)

COR NTD – November 2020

Presentation outline

- Overview of the Program (focusing on SCH)
- Program Goals (short/long term)
- Strategic plan to achieve goal/s
- Progress on Goals
- Timeline
- Challenges and gaps

Overview of the Program (focusing on SCH)

- Neglected Tropical Diseases (NTD) control and elimination efforts were integrated in 2009, forming the Neglected Tropical Diseases Control Program (NTDCP)
- Implementation of program activities under NTDCP was guided by the first Master Plan (2012 – 2017)
  - SCH was targeted for Morbidity Control

Overview of the Program (focusing on SCH)

- Mapping for SCH was done in 2004 across all councils using Blood in Urine (BIU) questionnaire
  - SCH was found to be endemic across all 184 councils
  - Burden varies from council to council
  - Preventive Chemotherapy (PCT) against SCH targets School-aged Children (SAC)
  - Mass Drug Administration (MDA) with Praziquantel (PZQ) started in 2005 and was scaled to all councils by 2016
    - All councils have received more than five rounds of MDA
- All councils are co-endemic with other PCT NTDs;
  - STH (184), LF (119), Onchocerciasis (28), Trachoma (71)

Program Goals

- NTDCP is currently drafting its second Master plan (2021 – 2025) in line with the WHO NTD 2030 Roadmap, and to be implemented in line with the Country HSSP V (2021 -2025)
- Revised SCH targets / goals
  - To achieve control of morbidity of SCH (<5% prevalence of heavy intensity of infection) in all endemic councils by 2025
  - To achieve elimination of SCH as a public health problem, EPHP (<1% prevalence of heavy intensity of infection) in all endemic councils by 2030
  - To achieve elimination of SCH infection (zero new cases) in all endemic councils by 2030?

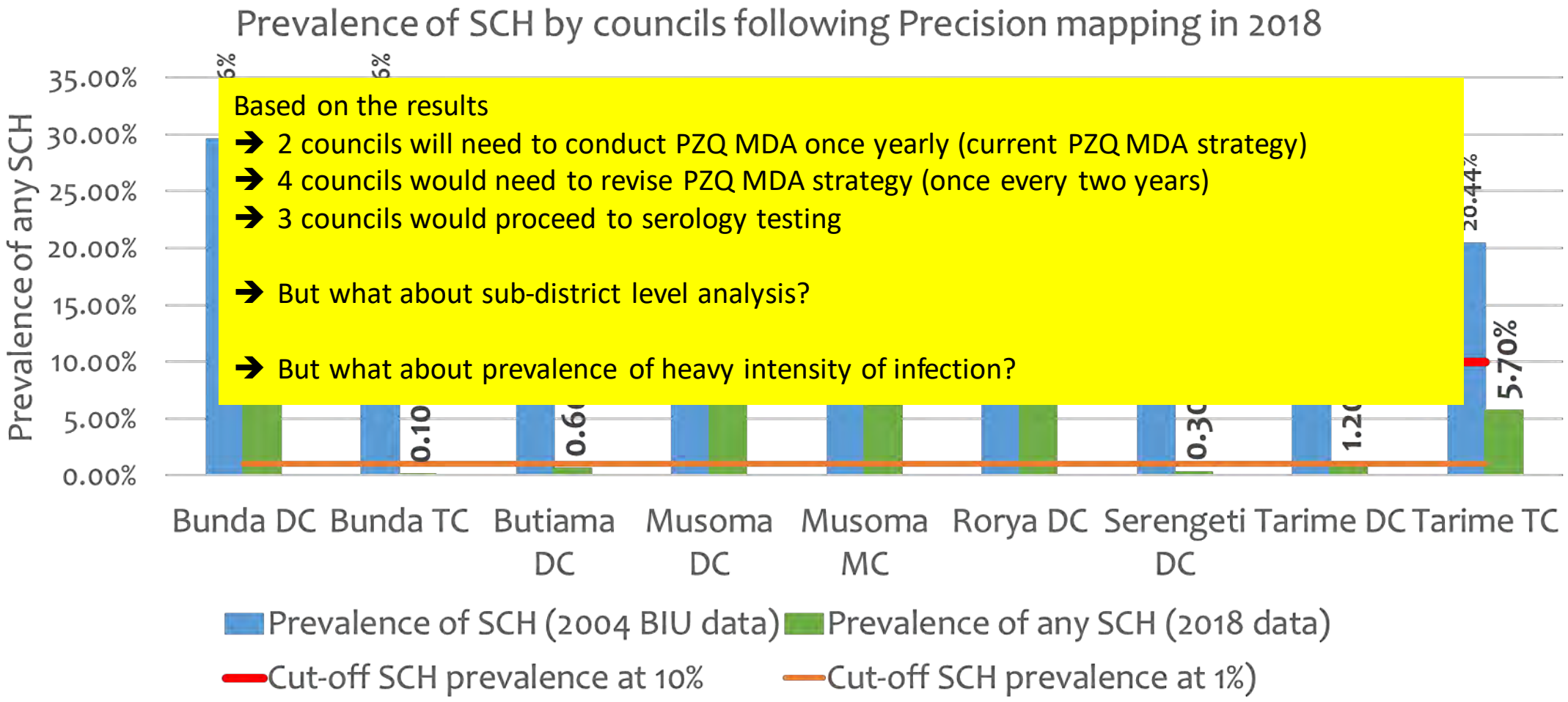
Strategic plan to achieve goal/s

- To conduct precision mapping to establish the impact of MDA and the current prevalence of SCH at ward level (sub-district level)
  - To get recent data on prevalence and intensity of SCH infection for programmatic decisions
- To continue with PZQ MDA where MDA is needed
  - To scale-down MDA at the ward level
  - To consider targeting High Risk Adults (HRA)
- To collaborate with other stakeholders including;
  - WASH sector to improve hygiene and sanitation
  - Vector control sector for control of snails
  - To strengthen BCC in the control of SCH in all endemic areas

Progress on goal/s

- All councils have received five rounds or more of PZQ MDA
- NTDCP has been able to conduct precision mapping in one region (9 councils) – Mara region (2018)
  - Mapping was done in 2004
  - MDA started in 2005
  - Five (5) rounds of MDA had been completed until 2018

Mara region – Prevalence of SCH – Council level



Mara region – Prevalence of SCH – Sub-district / Ward level

Council	No. of wards	No. of wards with SCH > 50%	No. of wards with SCH > 20% but < 50%	No. of wards with SCH > 10% but < 20%	No. of wards with SCH > 1% but < 10%	No. of wards with SCH < 1%
Bunda DC	18	0	2	3	5	8
Bunda TC	10	0	0	0	1	9
Butiama DC	17	0	0	0	5	12
Musoma DC	21	1	3	4	12	1
Musoma MC	12	0	0	2	9	1
Rorya DC	27	0	4	5	8	10
Serengeti DC	30	0	0	0	4	26
Tarime DC	24	0	0	1	4	19
Tarime TC	8	0	1	0	6	1
Total	**167**	**1**	**10**	**15**	**54**	**87**

Mara region – Prevalence of SCH – Sub-district / Ward level

Looking at Sub-district / Ward level data

- ➔ One (1) ward would need to revise PZQ MDA to conduct twice-a-year MDA
- ➔ Ten (10) wards would to continue with previous MDA strategy (once a year MDA)
- ➔ 15 wards would need to conduct PZQ MDA once yearly (current strategy)
- ➔ 54 wards would need to revise MDA strategy and conduct PZQ MDA once every two years
- ➔ 87 wards would need to progress to serology testing

Mara region – Prevalence of Heavy Intensity of Infection – Council level

Results of 2018 Precision Mapping		
Council	**Prevalence of Heavy Infection of S. Mansoni**	**Prevalence of Heavy Infection of S. Haematobium**
Bunda DC	0.00%	0.00%
Bunda TC	0.00%	0.10%
Butiama DC	0.00%	0.00%
Musoma DC	0.40%	0.00%
Musoma MC	0.10%	0.00%
Rorya DC	0.20%	0.10%
Serengeti DC	0.00%	0.00%
Tarime DC	0.00%	0.00%
Tarime TC	0.00%	0.00%

➔ All 9 councils reached control of Morbidity (<5%) and EPHP target (<1%)

Mara region – Prevalence of Heavy Intensity of Infection – Sub-district / Ward level

Council	No. of wards	S. Mansoni		S. Haematobium	
		No. of wards with SCH heavy infection <5% (Reaching Control target)	No. of wards with SCH heavy infection <1% (Reaching EPHP target)	No. of wards with SCH heavy infection <5% (Reaching Control target)	No. of wards with SCH heavy infection <1% (Reaching EPHP target)
Bunda DC	18	18	17	17	17
Bunda TC	10	10	10	9	9
Butiama DC	17	17	17	17	17
Musoma DC	21	16	16	21	21
Musoma MC	12	10	10	12	12
Rorya DC	27	25	25	27	27
Serengeti DC	30	30	30	30	30
Tarime DC	24	24	24	24	24
Tarime TC	8	8	8	8	8
Total	167	158	157	165	165

➔ Data at council level showed that all councils reached control of morbidity and EPHP, however, data at ward level revealed that not all wards have reached these goals

Mara Region	*S. mansoni*			*S. haematobium*		
Overall Prevalence	Prevalence of heavy intensity			Prevalence of heavy intensity		
	< 1%	**>= 1%**		**< 1%**	**>= 1%**	
< 10%	248 (85%)	1 (1%)	249 (86%)	283 (97%)	3 (1%)	286 (98%)
>= 10%	38 (13%)	4 (1%)	42 (14%)	5 (2%)	0	5 (2%)
	286 (98%)	5 (2%)	291 (100%)	288 (99%)	3 (1%)	291 (100%)

S. mansoni

- Following 5 rounds of treatment most schools (85%) are below 10% prevalence and below the threshold for EPHP of <1% prevalence of heavy intensity
- However, 13% of the total schools are below the EPHP threshold but above the 10% threshold meaning that frequency of treatment cannot be reduced.

S. haematobium

- Following 5 rounds of treatment the majority of schools (97%) are below 10% prevalence and below the threshold for EPHP of <1% prevalence of heavy intensity

Analysis of Precision mapping

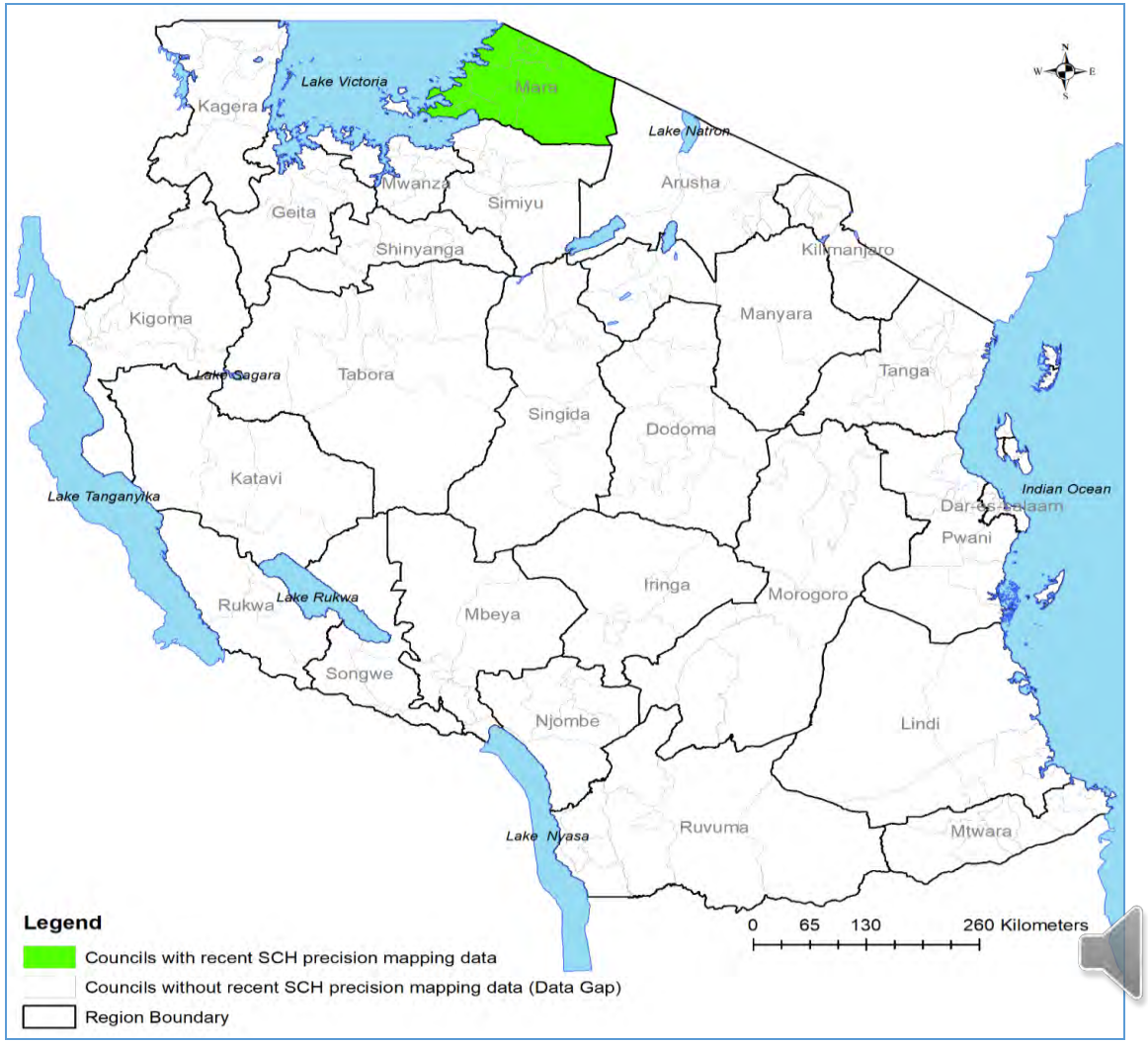
- Providing recent SCH prevalence data
  - Data at sub-district data.
  - Data on SCH heavy infection.

- **Thus, enabling the program to make informed programmatic decisions**

Challenges and Gaps

- Focal nature of the disease
- Outdated prevalence data
- No funds to conduct precision mapping across other regions
  - To have current prevalence data for programmatic decisions
- Maintaining optimum MDA coverage (above 80% of targeted population)
- Not treating HRA *in highly endemic areas* due to lack of funding
- Minimal collaboration with WASH sector
- Missing Vector (snail) control activities

Map highlighting SCH Data Gaps



Points of discussion

- What is the link between reaching EPHP and MDA based on prevalence of infection?
  - We saw that EPHP for Mara region was met in most wards (all councils), however, by prevalence data, MDA is still required in about half the wards / councils

Acknowledgement

World Health Organization
GlaxoSmithKline
MERCK
DFID Department for International Development
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UKaid from the British people
MUHAS
ESPEN Expanded Special Project for Elimination of Neglected Tropical Diseases
iTi International Trachoma Initiative
CDC Centers for Disease Control and Prevention
National Institute for Medical Research
MECTIZAN® Donation Program
Pfizer
SCI Schistosomiasis Control Initiative
ntd Centre for Neglected Tropical Diseases
IMA WorldHealth
Helen Keller International
Sightsavers
The Task Force for Global Health
envision a world free of NTDs
equinor
LSTM Liverpool School of Tropical Medicine
KCCO Kilimanjaro Centre for Community Ophthalmology
tibaT
The END Fund Ending Neglected Diseases
TAKeOFF Tackling the Obstacles to Fight Filariasis and Podoconiosis
USAID From the American People
Act to End NTDs East
RTI International

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Thank you

- Ahsante

Dr Pauline Mwinzi

Mr Lazarus Juziwelo

Mr Fikre Seife

Dr Dennis Kailembo

Prof Charlie King

Speakers in COR-NTD pre-meeting

"Elimination of Schistosomiasis as a Public Health Problem. Experiences on reaching the goal and what to do next from endemic countries."

7th October 2020

Challenges of using intensity of infection as a measurement of EPHP

Charles H. King, MD FACP

Center for Global Health and Diseases,

Case Western Reserve University

Cleveland, Ohio USA;

and

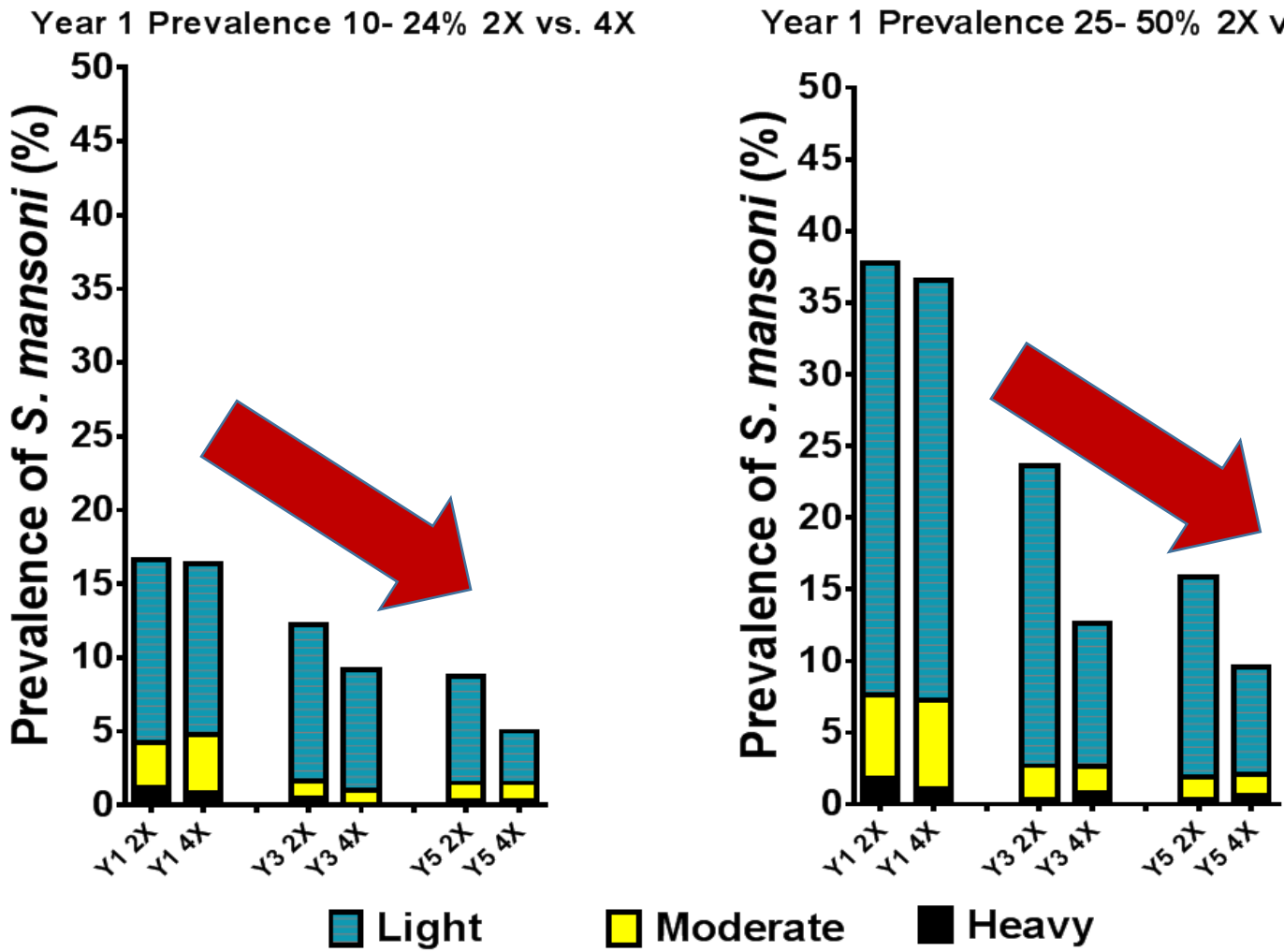
Schistosomiasis Consortium for Operational Research and Elimination (SCORE)

Athens, Georgia USA

The Problem:

- **EPHP is about control of disease**
  - **That is, control and elimination of morbidity**
- **Implementation of PCT/MDA is based on total prevalence**
- **Target endpoint is based on intensity (prevalence of heavy infection)**

SCORE: Regular school age MDA reduces prevalence and intensity of infections

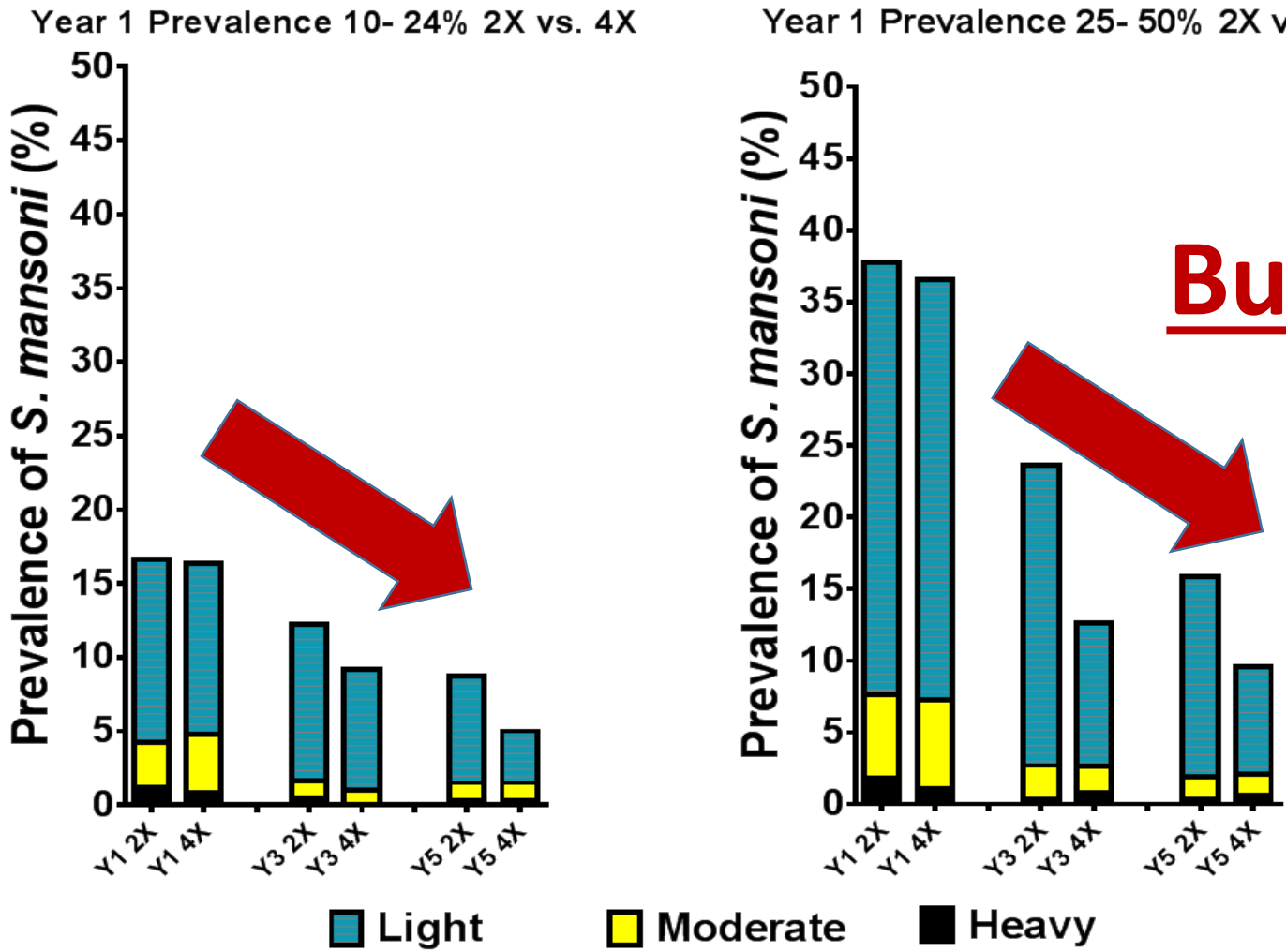


BUT…150 Individual Villages with Prevalence >25% at Baseline: What was their baseline heavy infection prevalence?

		Baseline Totals	Y5 heavy infection prevalence	
			<1%	≥1%
Starting Y1 heavy infection prevalence =>	<1%	37 (24%)	29 (19%)	8 (5%)
	≥1%	113 (75%)	59 (39%)	54 (36%)
Endline Totals			88 (59%)	62 (41%)

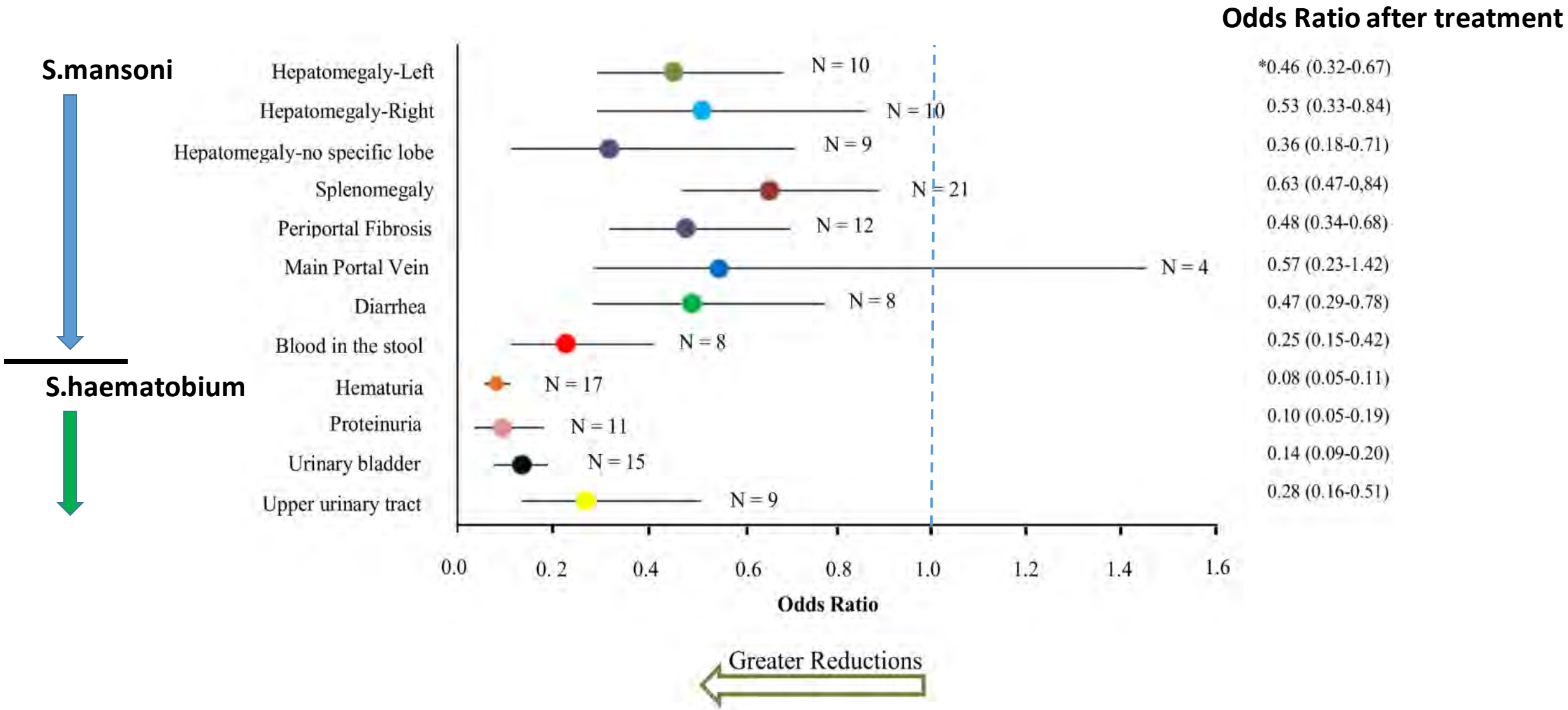
One-fourth of villages in this high prevalence Sm2 region already started out at <1% heavy infection prevalence, classified as having 'elimination as a public health problem' (EPHP)

SCORE: Regular school age MDA reduces prevalence and intensity of infections



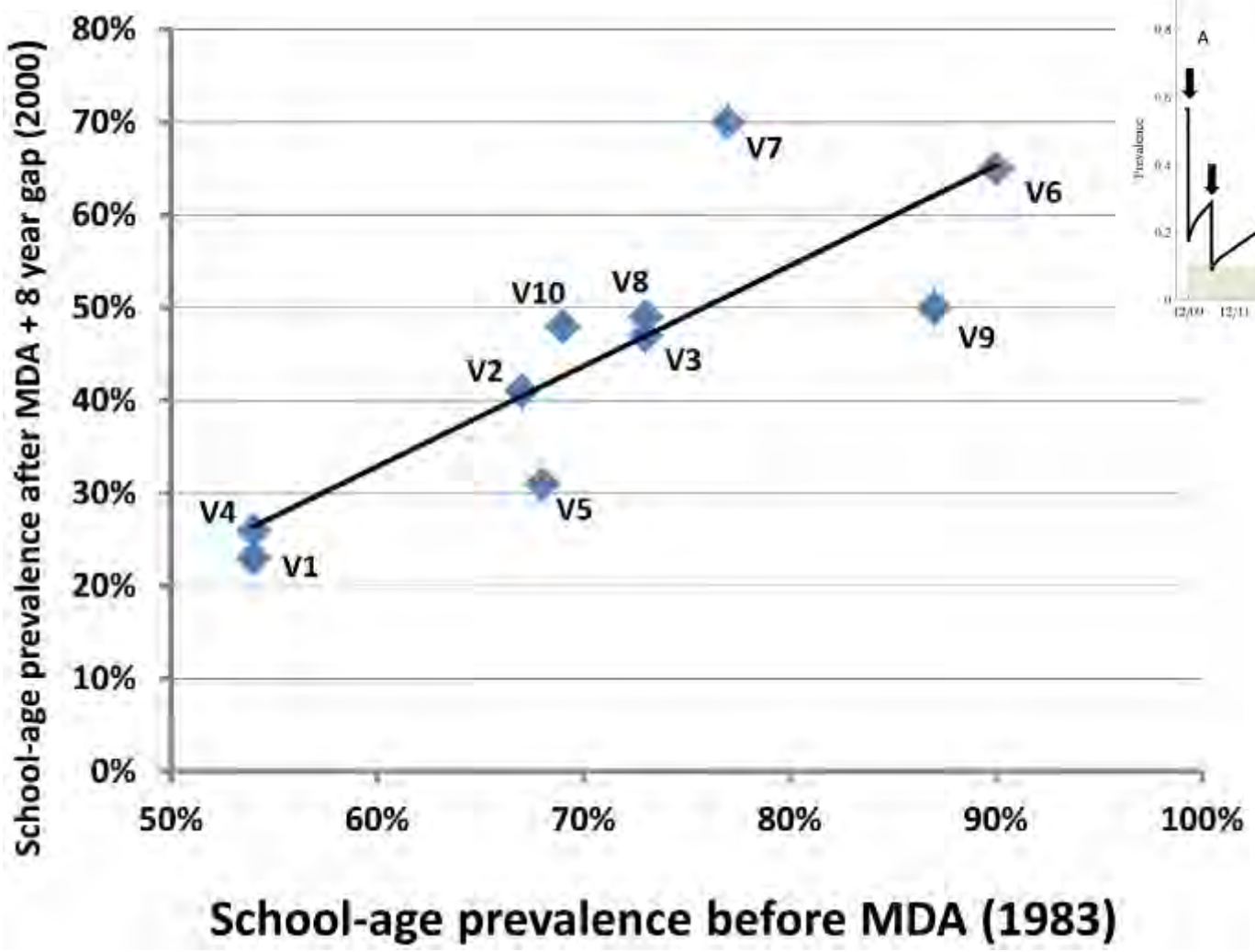
But not to zero!!

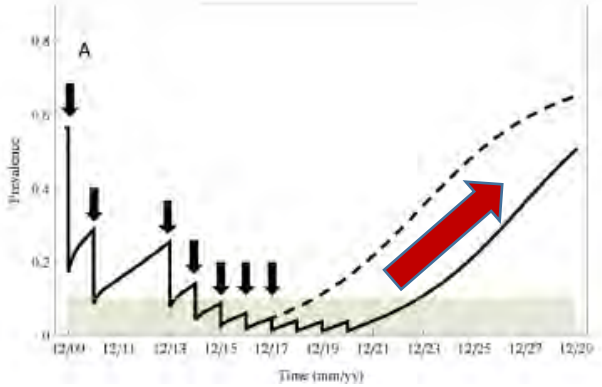
YES, anti-schistosomal treatment yields significantly lower odds of morbidity



Andrade et al., PLOS NTDs 2017

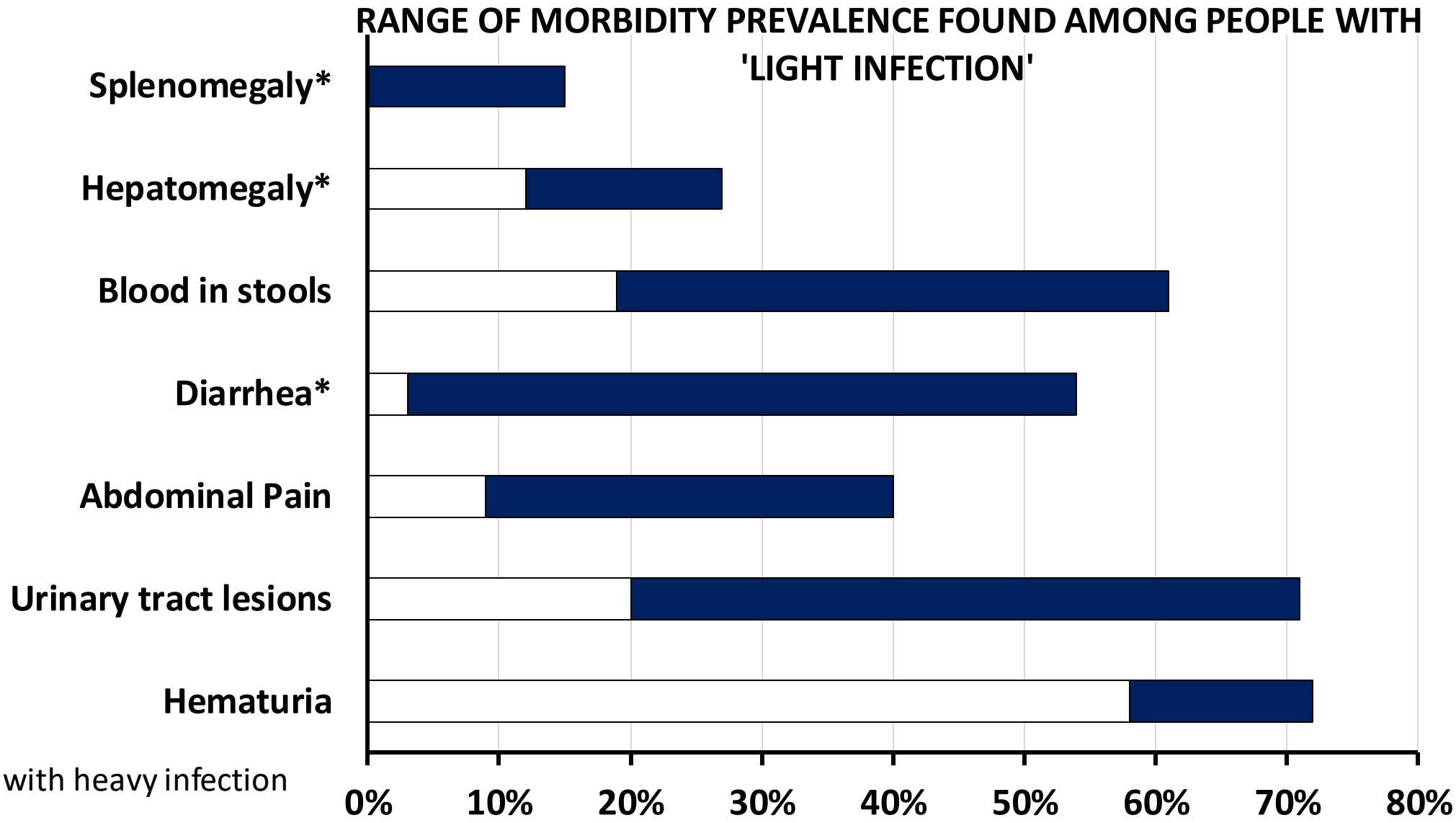
BUT…When you stop treatment: You can have ‘Return of the Worm’ after PCT





10 village experience
In coastal Kenya
over 16 years—
8 years’ SAC PCT,
then 8 years’ hiatus

Low intensity (‘light’) infections really do have disease



* Worse with heavy infection

So…What should be the next goal after EPHP?

- As currently defined (< 1% PHI), EPHP is not a solid target, because:
  - Infections will still occur
  - If they do, morbidity will still be common
  - Using just symptomatic screening and treatment may not be enough
- < 1% PHI is not the end of the morbidity control program
  - Must continue surveillance of infection
  - Proceed with complementary WaSH, BCC, snail control
  - Think toward Elimination of Transmission

Q & A

Dr Pauline Mwinzi

Mr Lazarus Juziwelo

Mr Fikre Seife

Dr Dennis Kailembo

Prof Charlie King

Speakers in COR-NTD meeting

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7 October 2020

Part 2: Parallel break-out discussions (40 min):

Group A: What is EPHP and what do you do once you have achieved the target (as it is currently defined)?

Chairs: Upendo Mwingira & Fiona Fleming

Rapporteur: Matt Weaver

Group B: What intervention strategies are required for communities where EPHP (as it is currently defined) has not been achieved?

Chairs: Anouk Gouvras & Darin Evans

Rapporteur: Alex Carlin

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BREAK OUT GROUP DISCUSSION (40mins)

Elimination of schistosomiasis as a public health problem

Group A: What is EPHP and what do you do once you have achieved the target (as it is currently defined)?

Chairs: Upendo Mwingira & Fiona Fleming

Rapporteur: Matt Weaver

FUN RETRO LINK: bit.ly/EPHP_1

VOTE FOR YOUR TWO TOP PRIORITIES

Group B: What intervention strategies are required for communities where EPHP (as it is currently defined) has not been achieved?

Chairs: Anouk Gouvras & Darin Evans

Rapporteur: Alex Carlin

FUN RETRO LINK: bit.ly/EPHP_2

VOTE FOR YOUR TWO TOP PRIORITIES

Group B: What intervention strategies are required for communities where EPHP (as it is currently defined) has not been achieved?

Chairs: Anouk Gouvras & Darin Evans
Rapporteur: Alex Carlin

House-keeping:

- Please MUTE your microphones when not speaking.
- Use the «Raise hand» function when you want to speak.

Thank you!

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Final Discussion

COR NTD – GSA Upcoming session

- COR NTD-GSA pre-meeting session: ***Approaching schistosomiasis elimination: from mass treatment to targeted interventions***. Lead: Steff Knopp. 18th September 2020. Recording available here on GSA website. Link shared in chat.

- COR NTD-GSA pre-meeting session: ***Elimination of Schistosomiasis as a Public Health Problem – Experiences on reaching the goal and what to do next from endemic countries.*** Lead Upendo Mwingira. Recording will be shared soon.

- COR NTD-GSA pre-meeting session: ***Decision making in schistosomiasis: Biological thresholds & acceptable risk in the implementation of schistosomiasis control strategies***. Lead: Fiona Fleming. 23rd October 2020

- COR NTD synthesized session 2B: ***Developing an M&E Framework for Schistosomiasis***. 13th November 2020 - 9:00 AM 12:00 PM ET

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Thank you for participating!