



# GHANA HEALTH SERVICE COUNCIL FOR SCIENTIFIC & INDUSTRIAL RESEARCH DODOWA HEALTH RESEARCH CENTRE

# GHANA FINAL DISSEMINATION REPORT

## PREPARED BY THE: COUNTDOWN RESEARCH UPTAKE TEAM



# **Recommendations for the Future**

#### Lymphatic Filariasis

1) LF and Malaria Control Programmes collaboration is imperative for progress.

2) Surveillance: There is the need for the National Malaria Control Programme (NCMP) in the area of long lasting insecticide-treated nets (LLITNs distribution and use to control other mosquito-borne diseases.

 Expand the activities of NCMP and NTD Programmes to capture recognised groupings (prayer camps, traditional healing centres etc).

4) Migration: People migrating should be educated on LLITNs ownership and use.

**5) Diagnostics:** Introduce more sensitive methods to improve the sensitivity of transmission assessment surveys (TAS) such as molecular xeno-monitoring).

#### Schistosomiasis/ Female Genital Schistosomiasis (FGS)

1) Improve sustainable access on therapeutic and geographical coverage (including out-of-school children and at-risk adults as well as CHPS (Community-based Health Planning & Services).

2) Provide of alternative water & sanitation systems through engaging community water and sanitation NGOs and District Assemblies.

**3**)Explore community-led approach for treatment: key for sustainability.

 Incorporating FGS into the National Agenda for trainings (Standard Treatment Guidelines)

5) Integration into sexual reproductive health (SRH) services - Family Planning (FP) and Sexually-transmitted infection (STI) treatment.

**6)** Capacity building for diagnosis of infection in low-intensity cohorts especially PSAC who can be easily missed.



#### **INTRODUCTION**



COUNTDOWN Ghana was launched on 15<sup>th</sup> October 2015 and since then has conducted implementational research in the Northern, Western and Greater Accra regions. Made up of a consortium of Neglected Tropical Diseases policymakers, researchers experts, and advocates, the COUNTDOWN Ghana team from partner organisations - Ghana Health Service (GHS), Dodowa Health Research Centre (DHRC) and the Council for Science and Industrial Research (CSIR) brought together а multidisciplinary team who over the next 4yrs will investigate how to make Mass Medicines Administration of accessible,

available, accepted and affordable to endemic communities.

The Ghana team explored the possibility of expanding access to schistosomiasis (SCH) treatment using praziquantel in areas with persistent transmission, contextualised hotspots of Lymphatic Filariasis and engaged in a cross-sectoral collaboration with the Global Polio Laboratory Network in Ghana to screen almost 500 stool samples to test for schistosomiasis (SCH) and Soil-transmitted helminthiasis (STH). The initial findings were shared at a workshop in May 2018, organised in Ghana. The health economics component of the research is still ongoing and when completed, the results will be shared with partners and the national control programmes.

Following the final analysis of the research findings, the COUNTDOWN Ghana team held a final dissemination workshop in Accra, Ghana on Thursday, 29<sup>th</sup> August 2019. The main objective was to engage NTD policy makers, researchers, medical and health practitioners, including non-governmental organisations (NGOs) working on NTDs to discuss the results and map a way forward to introduce NTD programmatic changes for improved and efficient service delivery and reach those left behind.

The meeting opened with a word of prayer and **Dr Mike Osei-Atweneboana** – the Director of the Water Research Institute (WRI) at the Council for Science and Industrial Research (CSIR) and the principal investigator on the COU**NTD**OWN project on the parasitology and diagnostics component, was designated the chair of the meeting, a task which he accepted. He emphasised the importance of the meeting as relates to NTDs. This was followed by a welcome note from **Dr Benjamin Marfo**, the COU**NTD**OWN Ghana Country Manager and the Director of the NTDs Programme at GHS. The workshop was presided over by the Mistress of Ceremony (MC), **Ms Esther Fynn-Banor**, from the Public Relations Unit of the Ghana Health Service (GHS).

#### PRESENTATIONS

**Dr Rachael Thomson** introduced the workshop participants to the COU**NTD**OWN project highlighting its multidisciplinary nature with expertise from across Cameroon, Ghana, Nigeria, Liberia, UK & USA; the challenges experienced during the implementation phase and how COU**NTD**OWN research has identified ways to expand access to treatment, understand more about the availability of NTDs within the health service and alternative methods to tackle 'hotspot' transmission areas.

**Dr Benjamin Marfo** provided updates on the Ghana Neglected Tropical Diseases programme activities for 2019. The NTDs Programme prioritised the following activities for 2019:

- Conduct surveys to elicit factors that have contributed to the persistent Lymphatic Filariasis (LF) hot spots
- Quality Improvement in 8 LF hot spots
- Conduct LF/Onchocerciasis MDA in 126 districts
- Conduct STH/SCH MDA in 185 districts
- Conduct Pre-Transmission Assessment Surveys (TAS) in 8 districts. (Bole, Sawla-Tuna-Kalba, Sunyani West and Municipal, Ellembele, Ahanta West, Nzema East, North Gonja participated). All districts failed the test except for North Gonja.
- Conduct TAS in 58 districts
- Morbidity Management & Disability Prevention (MMDP) training in Upper West, Upper East and Brong-Ahafo Regions
- Trachoma Post Elimination Surveillance Plan

Dr Marfo explained that a TAS was a survey designed to measure whether evaluation units have lowered the prevalence of infection to a level where recrudescence is unlikely to occur, even in the absence of MDA interventions. This is a key activity used in deciding if a country is free from a disease or not.

He highlighted the work going into the District Health Information Management System (DHIMS) such as ongoing discussions with the Planning Project Monitoring & Evaluation (PPME) which is to include all NTDs, MMDP, Female Genital Schistosomiasis, school MDA & community MDA indicators to the DHIMS; meeting with PPME to design reporting forms for all the indicators; develop standard operating procedure for all NTD reporting forms and plan for the training of health workers (District Directors of Health Services (DDHS), clinicians, Health Information Officers and Public Health officers).

In conclusion, Dr Marfo indicated that the Ghana Health Service had mapped a way forward to improve research evidence to guide hot spots, improve MDA uptake through effective social mobilization and training of Community Drug Distributors (CDDs). He added that the programme had to put through formal requests for police service security in some areas but called for more engagement with the Human Resources (HR) division to recruit the needed category of staff and strengthen monitoring and supervision, especially in remote areas.

#### Integrating Female Genital Schistosomiasis (FGS) into Country Health Programmes (GHS)

**Dr Benjamin Kofi Marfo** defined FGS as the presence of schistosomiasis ova in the female reproductive organs or a characteristic clinical pathology. He provided updates on efforts being made by the Ghana Health Service to create awareness on FGS through training of physicians and medical staff. He said that because symptoms could be misdiagnosed for a sexually-transmitted disease, it led to profound mental health problems due to social stigma resulting in marital discord and depression.

However, there are heavy implications of FGS on reproductive health that impact on maternal health outcomes. If left untreated, it could lead to sterility and there exists a susceptibility to contract HIV by FGS sufferers and a plausible association with cervical cancer.

Dr Marfo highlighted that urgent action was needed by public health programmes to increase awareness among health workers and policy makers to reduce incidences of clinical misdiagnosis, add FGS to the disease burden of women in all age-groups and increase social representation and illness or experience besides scientific knowledge in the health education models. He called for a country-wide integration to enable engagement of all directors of health services across the country, ensure involvement of FGS within all health programmes and increase clinical suspicion advocacy.

To conclude, Dr Marfo urged all stakeholders in attendance to

- seriously engage the Public Health, Family Health (Reproductive Health) and Institutional Care divisions of the Ghana Health Services
- make available diagnostics and surveillance tools including resources for management of FGS and
- intensify multisectoral collaboration e.g. WASH (Water, Sanitation & Hygiene), metropolitan, municipal and district assemblies (MMDAs) among others.

#### Schistosomiasis Study in Greater Accra Region (CSIR)

**Dr Samuel Armoo** who heads the Biomedical and Public Health Research Unit at the Water Research Institute – Council for Scientific & Industrial Research and leads the COU**NTD**OWN parasitology research component on expanded access for schistosomiasis (SCH) treatments reported on the key outcomes of the expanded treatment using PZQ in three SCH endemic communities in Southern Ghana (Tomefa, Torgahkope/Adakope and Manheam).

Baseline parasitological surveys were conducted, including a follow-up survey 6, 12 and 18 months after baseline studies. As part of the MDA which was expanded to include not only school-aged children but adults, out-of-school children and pre-school-aged-children (PSAC); there was an extensive community sensitisation exercise which included movie nights for educational purposes and using community health nurses to engage the rest of the

community. There was a call to pay attention to pre-school-aged children who could easily be missed by routine MDA. Publications such as peer-reviewed papers and blogs were communicated to the participants. The recommendations following data analysis include:

- Expanded community-wide access to PZQ led to significant reduction in the prevalence and intensity of SCH among all cohorts in some communities, six months after treatment. There were, however some exceptions, particularly at Manheam.
- In most of the study communities, there were significant increases in prevalence and intensity of SCH, 12 months after treatment. In Tomefa, prevalence remained high 18 months post-treatment.
- Other age-groups have emerged to be important in the control of the disease, despite the school-aged group remaining very important.
- The disease condition appears to be focal and therefore requires focal interventions. A multi-disciplinary approach to control the disease is recommended.
- Adverse events after PZQ treatment should be well-managed. Providing food before drug consumption makes a huge difference.
- Involving nurses from the District Public Health Unit leads to increased participation
- Improvement of the WASH facilities as a necessity and snail control should be included as an alternative preventative method.
- The urine-CCA dipstick can be used as an appropriate rapid diagnostic tool to estimate the prevalence of intestinal schistosomiasis in PSAC, particularly helpful in rapid identification of at-risk areas.
- The urine CCA assay is recommended to guide PSAC praziquantel treatment needs and should be included in routine surveillance of intestinal schistosomiasis.

The team are working on communicating the extent of the impact of the expanded treatment with PZQ & Albendazole (ALB), and reporting on the post-treatment of severe adverse events (SAE).

#### DISCUSSIONS

Following the presentations, discussions were sparked from the findings. **Mr Gilbert Dery** who is the NTD Focal Person for the Northern Region wished to know if other parasites outside of SCH were found. Dr Armoo responded that the team had looked at STH using Kato Katz, but prevalence was less than 1%. Dr Armoo added that there was a lot that was done but cannot be presented due to time constraints. Mr Dery also expressed that the <u>blog</u> on 'religion' appeared to be more of a speculation. Dr Armoo said the blog was meant to raise awareness as it was possible to contract SCH from infected waters during baptism ceremonies. He advanced that the team were open to collaborate with those wishing to conduct further studies on this. Mr Dery also highlighted that there was a need to decentralise the central NTD lines as it made it difficult to bring a national team to handle a focal disease.

Discussions took place around the use of water in endemic communities and Dr Armoo expressed that though some bore holes had been dug by some NGOs, the water was very salty

and not fit for human consumption and domestic activities. He advised that future interventions could consider treating the water as people living in these communities have a close relationship with water.

There was a question around how MDA knowledge is translated or reflected in programming? Dr Marfo responded that most of the lessons were helping to change how the programme activities were planned. There was another question on whether FGS diagnosis are compared to other diseases. Dr Marfo responded that at the service level, comparisons are done with biopsies.

**Dr Amoah** from the Western Region/Nzema East District suggested looking into the level of collaboration between the Metropolitan, Municipal & District Assemblies (MMDA) and programmes to bring water to the affected communities. **Mr Samuel Kwabla Nekpewu**, a representative from Shai Osuduku District asked why energies could not be channelled into attacking the source such as the snails that carry the cercariae larvae. He proposed looking into social behavioural change and the best way to sensitise and bring about change. **Dr Mike Osei-Atweneboana** contributed that a PhD student working with his team looked at snail infection of schistosomes and monitored this over a period of 3 months. This student discovered there was indeed active transmission of with snails and they are currently looking into further funding to expand research.

#### S Female Genital Schistosomiasis – Dodowa Health Research Centre (DHRC)

**Ms Vida Kukula**, the COU**NTD**OWN social science researcher from DHRC, gave a presentation titled – 'Assessing the Knowledge and Understanding of Community Members and Health Professionals on Female Genital Schistosomiasis: Baseline Exploratory Study in Shai-Osudoku District'. The objectives of the study she advanced, were:

- To determine community knowledge and perception of schistosomiasis and FGS
- To explore girls/women's understanding of their risk to FGS
- To explore healthcare professionals' knowledge and understanding of FGS
- Determine health professional and girls/women's understanding of urogenital symptoms

Sixteen communities from the Osudoku Sub-District of Shai Osudoku District situated in the South-Eastern part of Greater Accra Region of Ghana, were intentionally selected for this research because of their proximity and daily activities in and around the lake.

Using the qualitative methodology such as in-depth interviews, focus group discussions (FGDs) and vignettes with school pupils, the team were able to explore the knowledge of schistosomiasis and perceptions on FGS through participants' own words and perceptions.

The research was broken down into four themes:

- Knowledge of schistosomiasis and FGS
- Risk of schistosomiasis
- Interpretation of urogenital symptoms in females and
- Existing strategies for treatment of symptoms in females

The study concluded that there was a lack of knowledge and understanding of FGS and this was also evident in all the literature reviewed. Women and girls were less likely to be identified as being at risk of schistosomiasis, whilst the presence of FGS in women and girls tripled their risk of contracting HIV. The lack of knowledge among health professionals is widespread and could result in an increased risk of misdiagnosis and future irreversible gynaecological conditions, even maternal death. Therefore, it remains especially important to identify and treat girls who may have early schistosomiasis as the prevention and treatment of FGS is a social justice, reproductive health and human rights issue.

#### Recommendations:

- Engage all actors in sexual and reproductive health to discuss and act on FGS.
- Train and develop skills in sexual & reproductive health (SRH)/HIV and Maternal Health Service providers to diagnose and treat FGS.
- Incorporate FGS screening and treatment in the standard treatment guidelines for sexually-transmitted infections (STIs).
- Include FGS in the national agenda for trainings.
- Keep FGS **ACTIVE** on the agenda for trainings and workshops on maternal and SRH.
- Develop appropriate strategies for community messaging and engagement.
- Develop diagnostic and treatment platforms to reach young girls and women already affected by FGS in communities.

#### Ontextualizing Lymphatic Filariasis Hotspots in some districts in Ghana (DHRC)

This research was conducted by the social science team at Dodowa Health Research Centre. **Selase Adjoa Ofori** presented this work in the absence of **Irene Honam Tsey** who conducted the fieldwork and analysis. Participants learnt that in Ghana, 15 out of 98 endemic districts were designated as 'hotspots' districts by the NTD Programme, following an evaluation in 2017 which indicated the districts had a prevalence above 1%.

The study was conducted in the Western Region (Nzema East and Ellembele Districts) and Northern Region (West Gonja and Bole Bamboi Districts) of Ghana. These districts were purposively selected because they are LF "hot spots". Qualitative methods used included focus group discussions (FGDs), in-depth interviews (IDIs) with the main participatory tool for FGDs being seasonal calendars. The quantitative method deployed was household surveys.

The main objective of this study was to highlight barriers and opportunities for implementing MDA in communities with LF persistence. The results from the research indicate that:

- There are high levels of mobility/migration, livelihood activities, socio-cultural and seasonal activities which negatively impacted on community members access to MDA.
- There is a need for more flexibility in the MDA approach to ensure that it reflects the realities of the target population.
- Timing of MDAs should be decided by fostering community engagement through discussions with community members with the use of seasonal calendar on how best to plan the MDAs for an effective community response.

It was recommended that the Lymphatic Filariasis Control Programme should move beyond using only Mass Drug Administration (MDA) and be embedded within the health system to ensure all the affected groups are reached.

#### S Lymphatic Filariasis Elimination within reach (CSIR)

This research was done by the biomedical team at the Council for Science and Industrial Research (CSIR). **Edward J. Tettevi** based at the Biomedical & Public Health Research Unit at CSIR – Water Research Institute and oversaw this stream of work, gave the presentation.

In Ghana, Lymphatic Filariasis (LF) is still present in 15 districts though the World Health Organisation's Global Programme to Eliminate Lymphatic Filariasis' (GPELF), earmarked 2020 for the elimination of LF. Mass Drug Administration to control LF in Ghana has been ongoing for 15years and COU**NTD**OWN research set out to investigate why there was persistence despite almost two decades of preventive chemotherapy.

The main aim of this study was to assess the efficacy of MDA, improve access to MDA for the most vulnerable group, incorporate molecular xeno-monitoring during transmission assessment surveys (TAS); and finally, to assess the impact of seasonal migration on LF persistence.

Communities were selected from the Northern Region (5 savannah communities) and Western Regions (3 coastal communities), where MDA is still ongoing, and prevalence is >1%. Parasitological and epidemiological data was collected. Entomological samples and data were collected.

Findings from research indicate that:

- 1. MDA coverage and interventions adherence are factors in explaining LF persistence.
- 2. A large portion of the community members are not reached by MDA and bed net distribution systematically. The adult males may represent a consistent part of this group of people.
- 3. MDA coverage is lower than reported. This may have played a role in the slower than expected reduction in the microfilariae prevalence. Further MDA rounds with increased coverage are needed.

Recommendations from study are as follows:

- Improvements to the MDA programme should focus on ensuring adequate and constant coverage in the affected communities, considering regional differences in people's movements and the availability of community members during drug distribution.
- Great benefit would emerge from the LF control programme liaising with the National Malarial Control Programme in the implementation of complementary vector control strategies.
- Molecular xeno-monitoring needs to be incorporated into TAS, to increase its sensitivity.

The team will communicate the findings of the research to the NTDs National Control Programme and further publish to inform the research community at large.

#### **FGS/SCH Discussions**

It was agreed that there is a need to conduct serious re-orientation on FGS with health workers, district health officers and religious leaders. **Caroline Otoo** from the GHS asked if DHRC had intentions of extending the FGS research programme to other regions of the country. The response was that knowledge gained from the other regions will permit an informed approach to tackling the disease in other regions. Mrs Otoo also asked if the SAEs were reported during the expanded PZQ treatment, to which Dr Samuel Armoo replied that any such cases will be reported.

**Mr David Agyeman** from **Sightsavers** enquired about the emphasis on FGS and not male genital schistosomiasis (MGS). He also asked if anyone knew the prevalence of MGS in Ghana? Dr Marfo agreed that compared to FGS, there are limited studies of MGS in Ghana which he had indicated in his previous presentation. **Ms Vida Kukula** added to this, emphasising that it is general knowledge that boys get SCH but the case in girls needed to be highlighted more as it is often misdiagnosed leading to severe health consequences.

Mr Agyeman asked Dr Samuel Armoo if at Tomefa, it was the same people interviewed during follow-up? Dr Armoo clarified that it was a longitudinal study, with participants given ID numbers and participation was very high. There was a question on the veracity of resistance to PZQ, to which Dr Armoo said he would rather not speculate in an attempt to offer a response.

#### ➢ LF Discussions

**Mr Gilbert Dery**, the NTD Focal person for the Northern Region in Ghana expressed that he was not sure that most MDAs took place during fasting periods as the presentation had insinuated. He highlighted the areas of study were not mostly Muslim and wondered at the SAE constituting 32%, as his report did not reflect this figure. Mr Dery said that most people missing MDA due to economic activities and 'galamsey' (illegal surface mining) was general knowledge.

Ms Selase Ofori clarified that there is data on refusals based on SAEs and that a more sectoral approach is needed being as the situation is more complex and blanket solutions will not work.

The WHO Representation, **Dr Felicia Owusu Antwi** observed that MDA uptake is sometimes low due to refusals and this calls for a change in strategy except for the house-to-house MDAs.

Dr Marfo said the NTD Programme was looking into increasing MDA uptake by studying migration on a case by case basis.

Further discussions led to proposed solutions:

- Flexibility for MDAs with Northern and Southern Regions covered based on weather seasons, preferably during the dry season.
- Extension of the administration unit to permit greater coverage.
- Focus on the active views of the community members and work hard to ensure that people appreciate the use of bed nets. There is a need to educate people on the usage of bed nets as it was observed that in the Kumasi area, some used them to cover farm products on sale such as plantains, yams and cocoyams.
- Educational material should be sent early in the year to strengthen sensitisation early enough.

There were discussions around how practical these solutions will be and whether they can work. The question on delivering MDA in the work place also surfaced.

**Professor Daniel Boakye** advised for this discussion to be had with partners, considering the seasonal variations especially with LF. Dr Marfo confirmed that he was in discussion with partners/funders on exercising flexibility around this issue.

Mr Dery raised the issue of the malaria and LF programmes working together as not being a point for discussion but should be a matter of law. Prof. Boakye chimed in, adding it was not the first time this issue was coming up. He said that since 2008, this has been appearing at the international level and participants present needed to ask WHY this is not being addressed. Prof Boakye said if Ghana worked on this, it could be the solution provider for others to follow. Dr Mike Osei acknowledged that Dr Marfo will investigate this.

#### O Possible Policy Implications for the Health System in Ghana

The afternoon session saw the participants divided into two groups: one group looked at the recommendations from the research on LF and the second group addressed recommendations from SCH research. The brainstorm from this session led to proposals for improving the health system in Ghana moving forward.

#### **Lymphatic Filariasis Policy Implications**

This group in discussion explored migration during MDA, integration of the LF and the Malaria Control Programmes. The proposed outcomes were presented by **Ms Selase Ofori**.

Integration	Migration & Diagnostics
<ul> <li>The NTD Programme should work together with the National Malaria Control Programme (NMCP) in the area of long-lasting insecticide-treated nets (LLITN) distribution and collaborate on controlling other mosquito-borne diseases.</li> </ul>	<ul> <li>How to get those migrating to take the drugs.</li> <li>People migrating should be educated on ITN ownership and use.</li> <li>All MDAs should be followed by a mopup.</li> </ul>
• <b>Surveillance:</b> in the use of the ITN, surveillance can be carried out on NTDs in the distribution and use chain.	<ul> <li>Whether it should be TAS or Pre-TAS</li> <li>Introduction of more sensitive methods to improve the sensitivity of TAS (e.g. Molecular xeno-monitoring).</li> </ul>
<ul> <li>Expansion of the activities of NMCP and NTD Programmes to capture recognized groupings (prayer camps, traditional healing centres etc.)</li> </ul>	<ul> <li>Should it be a one-time treatment for all the zones?</li> <li>Talk to partners and think about doing all round treatments.</li> </ul>

#### Schistosomiasis Policy Implications

This group focused on tackling schistosomiasis re-infection, improving access to FGS screening and treatment and the alternative diagnostic tests.

The following policy implications were proffered and presented by Dr Priscilla Amoah.

Integrated Approach	FGS	Diagnostics
Improving sustainable access on therapeutic and geographical coverage (including out-of-school children and at-risk adults) as well as CHPS (Community-based Health Planning & Services	Integration into sexual reproductive health (SRH) services – Family Planning (FP) and Sexually-transmitted infection (STI) treatment	More sensitive alternative diagnostic tests
Provision of alternative water & sanitation systems through engaging community water and sanitation, NGOs, District Assemblies	Incorporating FGS into National Agenda for trainings (Standard Treatment Guidelines)	Capacity building for diagnosis of infection in low intensity cohorts
Education	Awareness creation at all levels	Pre-School Aged Children (PSAC) can easily be missed for schistosomiasis
Vector control – BT (safe), testing new chemicals, Habitat re- engineering: paying attention to environmental issues	Monitor FGS through and indicator on DHIMS (District Health Information Management System)	
Explore community-led approach for treatment–key for sustainability		

It was agreed that a community-led approach for treatment is key to programme sustainability. Dr Mike Osei noted the importance of water and vector control for the needed integrated approach. It was suggested that effectively managing SAEs was necessary to build confidence within communities and encourage them to try MDA.

#### CONCLUSION

Dr Rachael Thomson in the closing address praised the tremendous work achieved by the COU**NTD**OWN research project in Ghana. She congratulated participants on the breath of discussions had throughout the day with solutions on moving forward with the Ghana NTD Control Programme. Dr Thomson presented the COU**NTD**OWN partners from Ghana with plaques and gifts to express gratitude for their collaboration with the Liverpool School of Tropical Medicine on this implementation research.



The chair of the meeting, Dr Mike Osei Atweneboana said what was notable about COU**NTD**OWN was its ability to connect social science with parasitology, biomedical and public health research. He remarked that when these were connected, it produced incredible outcomes. Dr Mike Osei expressed the greatest achievement from the project has been that FGS and maybe MGS has been put on the spotlight further. He urged for all the policies discussed during the workshop to be put on the action plan and implemented, as it will allow for a lot to be achieved. Dr Mike Osei urged all the NTD experts, researchers and health practitioners to galvanize their teams and use discussions had during the workshop to ensure LF and SCH can be eliminated between 2019 – 2025.

He extended immense thanks to COU**NTD**OWN and DFID and confirmed that the programme had made enormous changes to Ghana. Dr Mike Osei thanked partners, the Ghana Health Service, Dodowa Health Research Centre (DHRC) for the work on FGS, CSIR and all other stakeholders for supporting this research. To conclude, he said that he hoped the next meeting will be a pronouncement of an LF-free Ghana. With that, the COU**NTD**OWN final dissemination workshop was declared closed.

#### ACKNOWLEDGEMENTS

- o WHO
- o USAID/FHI360
- Sightsavers

- o CouNTDown/DFID
- o CNTD/DFID
- o Ghana Education Service
- Regions and districts
- o CDDs and Communities

#### **APPENDIX**

#### 1 – Agenda

TIME	ACTIVITY	LEAD/FACILITATOR	
8:30 - 9:00	Registration	Secretariat	
9:00 - 9:20	Message from COU <b>NTD</b> OWN	Dr Rachael Thomson	
9:20 - 9:40	2019 NTD Update	Dr Ben Marfo	
9.40 -10.00	Female Genital Schistosomiasis	Dr Ben Marfo	
10.00 - 10:35	Schistosomiasis study in the Greater Accra Region	(CSIR)	
10:35 - 10:45	Snacks	ALL	
10:45 - 11:20	FGS study in Shai Osudoku, Greater Accra Region	Social Science, Dodowa Health Research Centre	
11:20 - 11:30 Discussions/Questions		ALL	
11:30 -12:05	LF hotspot study in three districts in the Western Region	Social Science, Dodowa Health Research Centre	
12:05 - 12:40	LF hotspot study in three districts in the Northern region	CSIR	
12:40 -12:50	Discussions/Questions	All	

12:50 - 13:50	Lunch	All
13:50 -14:25	Health Systems and policy implications	Dodowa Health Research Centre
14:25- 15:05	Group work on possible policy implication	Dr Mike Osei-Atweneboana, Dr Marfo & Prof Margaret Gyapong
15:05- 15:30	Plenary Session	ALL
15:30 - 16:00	Next Steps	Dr Ben Marfo and Dr Rachael Thomson
16:00 - 16:10	Snacks and Closing of the meeting	All

#### 2 – ATTENDANCE LIST

No	Name	Institution
1	Mr Samuel Kwabla Nukpewu	GHS/Shai Osudoku District
2	Miss Esther Fynn- Bannor	GHS/PR Unit
3	Miss Edna Owusu-Ansah	GHS/PR Unit
4	Dr Ben Marfo	GHS/NTDP
5	Ms Evelyn Aryeetey	FHI360
6	Mr Odame Asiedu	GHS/NTDP
7	Ms Happy Ametorwodufia	GHS/Ga South
8	Mr Patrick Atikpo MAwulolo	AIM Initiative
9	Miss Asah Rachel	GHS/PR Unit
10	Mr Bright Alomatu	GHS/NTDP1
11	Mr Gilbert Dery	GHS/Northern Region
12	Mrs Rachael Annan	GrowthAid
13	Mrs Caroline Otoo	GHS
14	Ms Vida A Kukula	DHRC
15	Mr Wunpini Sayibu	World Vision
16	Dr John Williams	DHRC
17	Dr Samuel Armoo	CSIR
18	Dr Rachael Thomson	LSTM/CouNTDown
19	Dr John K Odoom	Noguchi Memorial Institute for Medical Research
20	Mr Abraham Apetor	GHS/Western Region
21	Mrs Selase A Ofori	DHRC

22	Mr Kenneth Nartey	DHRC
23	Mr Mensah Ernest	GHS/NTDP
24	Mr Prince Oppong Darko	GHS/Ellembelle District
25	Mr Samuel Odoom	AIM Initiative
26	Mrs Dorcas Hushie	GES/SHEP
27	Dr Alberta Amu	DHRC
28	Dr Felicia Owusu Ansah	WHO
29	Ms Theresa Sekoh	GHS/Institutional Care Divison
30	Mr David Agyeman	Sightsavers
31	Dr Jacob Mahama	GHS/Western Region
32	Dr Osei Atweneboana	CSIR
33	Mr Solomon Atinbire	AIM Initiative
34	Ms Winnifred Ekua Baidoe	GES/SHEP
35	Dr Priscilla Amoah	GHS/Nzema East
36	Dr Berthine Njiemown	Deloitte
37	Ms Monica Barret	Deloitte
38	Dr Elizabeth Awini	DHRC
39	Ms Awurabena Dadzie	World Vision
40	Dr Yaw Afranie	University of Ghana Medical School
41	Dr Eric Amuah	ASCEND
42	Dr Philips Davies	ASCEND
43	Mr Abednego Yeboah	GHS/NTDP
44	Mr Daniel Ashon	GHS/Greater Accra Region
45	Dr Luiz Amousson	GHS/GARHD
46	Dr Michael Dade	Volta River Authority
47	Mr Brown Davies	FHI360
48	Prof Daniel Boakye	Noguchi Memorial Institute for Medical Research
49	Ms Judith Saare	GHS/NTDP
50	Mr Timothy Akwetey	<i>u u</i>
51	Ms Maame Esi Amekudzi	GHS/Policy Planning and Monitoring & Evaluation
52	Ms Rachael Oartey-Papafio	GHS/PR Unit
53	Mr Michael Kojo-Appiah	GHS/Ahanta East
54	Ms Sophia Ampofo Kusi	GHS/Policy Planning and Monitoring & Evaluation
55	Mr Edward Jenner Tettevi	CSIR
56	Ms Pamela Bongkiyung	LSTM/CouNTDown
57	Ms Nyameke Asuah- Kwasi	GHS/CouNTDown
58	Ms Adriana Opong	
59	Mr Clement Amoah	<i>u u</i>

### 3 – Social Media





#### Ghana Final Dissemination Tweets

29.08.2019



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#### COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 29

Our director Dr Rachael Thomson presented an overview of the project w/ emphasis on its multidisciplinary make-up and how our work has identified better ways to improve access to medication & availability of services. Key challenges include hard to reach groups and mental health.



COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 29 Good morning folks. In Accra - Ghana, where diverse #NTDs experts from across the c'try are gathering to discuss the findings of our research in Ghana which includes expanding access to #Schisto treatm't, contextualising #LF hotspots & knowledge gaps in #FGS learning. Exciting...



COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 29 Meeting begins with prayers and Dr Mike Osei-Atweneboana is presented as the chair for the meeting. He highlights that today is very important day for #NTDs and this is followed by a welcome note from Dr Benjamin Marfo, the @ntdghcountdown country director and #NTDs Director.





#### COUNTDOWNGH @ntdghcountdown · Aug 29

The disseminating meeting started with the Programme manger ack'ledging partners from the various regions where field activities were conducted @NTDCOUNTDOWN @CountdownNTDCam



COUNTDOWNGH @ntdghcountdown · Aug 29 The programme manager gives the life cycle of #SchistoFGS causes profound mental health infertility, cancer of cervix @NTDCOUNTDOWN.





COUNTDOWNGH @ntdghcountdown - Aug 29 NTD's affect 1/7 of the world's population Dr Benjamin Marfo @NTDCOUNTDOWN @GHS\_HealthPromo



COUNTDOWNGH @ntdghcountdown - Aug 29 If #malaria cases can be managed at the primary healthcare level so should #LF @MMDPproject @CombatNTDs @NTDCOUNTDOWN



UKaid



Men and boys mostly seen to be more at risk of contracting #Schisto than girls/women. If girls/women present with symptoms of #FGS, it is viewed through a sexual lens therefore misdiagnosed for STIs. @vidash67 addresses misconceptions around #FGS from communities w/ prevalence.



Theresa Hoke @TheresHoke - Aug 29

prevalence.

Here's our @NTDCOUNTDOWN colleague @vidash67 Kukula sharing evidence with national #NTD stakeholders in Accra about the most common #ReproductiveHealth problem many of us have never heard of. journals.plos.org/plosntds/artic...

© COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 29 Men and boys mostly seen to be more at risk of contracting #Schisto than girls/women. If girls/women present with symptoms of #FGS, it is viewed through a sexual lens therefore misdiagnosed for STIs. @vidash67 addresses misconceptions around #FGS from communities w/





COUNTDOWNGH @ntdghcountdown · Aug 29 Seneral misconception about #LF is a barrier to MDAs @GHS\_HealthPromo @NTDCOUNTDOWN



6

COUNTDOWNonNTDS @NTDCOUNTDOWN - Aug 29 "Men are less likely to both own and use a bednet than women." @eddyKwami from @CSIRGHANA discusses findings from @ntdghcountdown research on #LymphaticFilariasis hotspots in Ghana. @CountdownNTDCam @gaelf10 @COUNTDOWNNG @COUNTDOWNLR





Theresa Hoke @TheresHoke - Aug 29 Practical strategies for #LF control, derived from @NTDCOUNTDOWN #implementationresearch findings, are being shared at today's national stakeholder meeting. ncbi.nlm.nih.gov/pmc/articles/P... @Konr83

COUNTDOWNonNTDS @NTDCOUNTDOWN - Aug 29 A large number of communities not reached by bednet distribution. There is a need to take #MDA to the households. Show this thread



A large number of communities not reached by bednet distribution. There is a need to take #MDA to the households.



COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 29

"We understand the serious nature of the disease present in the water. But, the river is our only source of water, so what should we do?" Asks a schoolgirl in a region endemic with #Schisto #FGS #NTDsGhana @Health\_ghana @WHOGhana @GHS\_HealthPromo @DFID\_Research @CountdownNTDCam



COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 30 The 1 audience fully enaged and contributed hugely to discussions around research presented from @ntdghcountdown @NTDCOUNTDOWN research. This led to many suggestions such as this one by the Focal @NTDs Coordinator for the Northern Region in Ghana @Health\_ghana @DFID\_NTDs



COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 30 As the @ntdghcountdown research comes to a close, our director Dr Rachael Thomson @rfletch72 expressed how impressive it was to see the outcome of tremendous work achieved over the past 5yrs. She highlighted the breathe of discussions had as testament to importance of the work.



COUNTDOWNonNTDS @NTDCOUNTDOWN - Aug 30 To crown it all, the Chair of the meeting Dr Mike Osei-Atweneboana @oseiatweneboana, the Director of the Water Research Institute @CSIRGHANA said what was noble about the #COUNTDOWN project was its ability to connect the social sciences to the biomedical and health economics.





#### COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 30

What an honour to have our @ntdghcountdown External Advisory Panel member join us - Prof. Daniel Boakye, a renowned #Oncho & #LF researcher based at the Noguchi Memorial Institute for Medical Research in Ghana. He provided invaluable insights drawing from his extensive expertise.





COUNTDOWN Calling time on Neglected Tropical Diseases COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 30

He extolled the @ntdghcountdown team for their hardwork and called on attendees to galvanise their teams with discussions had at the meeting to ensure elimination of #LF by 2025 and #Schisto by 2030. He thanked @DFID\_UK for its generosity & the COUNTDOWN project which has brought





enormous changes to #Ghana. He also thanked partners in Ghana ... @GHS\_HealthPromo @DodowaHRC @CSIR and all other stakeholders such as Ghana Education Service for supporting and promoting the research. Dr Osei-Atweneboana said his hope was that the next meeting will be the **\*** of





COUNTDOWNonNTDS @NTDCOUNTDOWN · Aug 30 Replying to @NTDCOUNTDOWN

an #LymphaticFilariasis-free Ghana. With that, the meeting was closed.



#### Explore Ghana T @ exploregh · Aug 30 RT @williammicah666: RT @NTDCOUNTDOWN: enormous changes to #Ghana. He also thanked partners in Ghana @ @GHS\_HealthPromo @DodowaHRC @CSIR and all other stakeholders such as Ghana Education Service for supporting and promoting the research. Dr Osei-Atwene... Calling time on Neglected Tropical Diseases

