1) **Rapid Assessment of Community Preparedness for Neglected Tropical Diseases Mass Drug Administration (MDA) Activities in the Context of COVID-19, Kenya**

**Background and Methods**

- **Objectives:**
  - To establish the perceptions of the community members on LF activities in the face of COVID-19
  - To assess the willingness of communities to take part in LF MDA & survey activities planned for November 2020
  - To explore the perceptions of the CDDs and the frontline health providers on their involvement in the program activities given the COVID-19 context.
- **The study was done in Mombassa County due to the high risk of COVID-19 transmission and Kilifi was selected due to the low preparedness towards COVID-19 mitigation.**
  - In Mombasa, the study was conducted in Jomvu sub-county and in Kilifi, the study was conducted in Margarini sub-county
- **This was a cross-sectional study using mixed methods**
  - 52 IDIs were conducted with CDDs, frontline health providers, local community leaders, religious leaders, program implementers etc.
  - Observation checklists
  - A short questionnaire that involved 969 community members
  - Online survey - shared through WhatsApp.
  - Qualitative data were transcribed, translate, and typed before analysis
  - Quantitative data analysis was done by SPSS
Key Findings & Recommendations

- **Participation in the LF MDA activities:**
  - In Kilifi, when asked if they would attend an MDA campaign in the context of COVID-19, the majority of respondents (93.1%, n=491) said yes.
  - When asked if they would allow CDDs to visit their homes to deliver LF drugs during the MDA, 98.7% (n=457) of respondents said they would allow it.
  - The residents of Mombasa County were asked if they would be willing to participate in a study to be conducted by MoH on LF - the majority (90.8%, n=477) said yes.

- **Community Adherence to the MOH guidelines on COVID-19**
  - In both counties, most community members were taking preventative precautions at the time of assessment.

- **Most appropriate Social Mobilization Channels**
  - Community leaders, Radio, and use of CDDs/CHVs

- **Adherence to MOH Measures on Preventing the Spread of COVID-19**
  - Most of the CDDs were doing their best to adhere to MOH measures on preventing the spread of COVID-19 (using plastic spoons to distribute drugs and sanitizing their hands)

- **The willingness of the community to take part in the MDA**
  - The community was willing and ready to cooperate by following the instructions given by the CDDs
  - The uptake of drugs was good
  - University students at universities and colleges were not covered because they were not at home.
  - Some community members had expectations such as money, nets etc.

- **CDD behavior during LF MDA**
  - The CDD asked for the age before dispensing drugs
  - They were all dressed in branded reflectors
  - Explained that the drugs had adverse effects that may be experienced

- **Recommendations:**
  - Social mobilization incorporating COVID-19 messages should be done at least two weeks prior to the MDA
  - Social mobilization channels include elders responsible for nyumba kumi (10 households), religious institutions, radio, public address systems, posters to target the elites, pictorial posters etc.
  - CHVs, assistant chiefs and chiefs/local leaders involved in the MDA campaign should be well trained before engaging them in the activities
Local administration should be involved in enforcing COVID-19 measures and the youths in sensitization.

Support of the frontline workers is critical. This can be done through the issuance of insurance coverage against COVID-19, risk allowance, mental health counseling and provision of fuel for the field supervisors during contact tracing.

2) Preventing the spread of COVID-19 during MDA in Anambra State, Nigeria

Background and Methods

- Anambra State in Nigeria has 21 districts known as Local Government Areas (LGAs)
  - On average, 2-3 million people are treated per year for LF, Oncho SCH or STH
  - Total population = ~5.9 million
- Objective: document scope of and adherence to COVID-19 prevention and mitigation measures.
- Methods
  - Observation, primarily capturing data electronically
  - Interviews and focus groups
  - Cost analysis
  - The timeframe was between December 2020 to August 2021

Key Findings & Recommendations

- Observations conducted so far:
  - 132 health facilities visited in 16 LGAs
  - 132 house to house MDAs in 16 LGAs
  - 132 community observations and reporting processes in 16 LGAs
  - 92 centrally distributed MDAs in 12 LGAs
  - 70 trainings in 8 LGAS
  - Adherence to protocols was excellent during training, except for a lack of COVID-19 testing before training
  - Nearly all CDD’s were adhering to all the prevention measures
  - When MDA was observed in the community, most people were able to wash their hands frequently.
  - There was some ability to maintain physical distancing but people didn’t wear masks regularly.
- Interviews and Focus Groups
  - 48 focus groups
CDD: noted that MDA took longer and took more effort (more supplies to carry, out-of-pocket spending etc.)

- Coverage may have been increased - maybe because more people were at home and there were more visits. They had to do extra sensitization this time around due to misinformation and disinformation.
- Communities: In general, adaptations were viewed favorably by communities particularly by washing hands. They saw value in the extra precautions.

**Cost implications**
- Need to train more people
- Increases in transport costs (some due to social distancing)
- Overall costs increased by 34%.
  - New costs due to PPE

**Recommendations:**
- NTD programs and partners must actively address misinformation
  - Particularly necessary in rural areas
- Maintain extra attention to hygiene, health education and mobilization efforts

3) **Evaluation of MDA Restart in the context of COVID-19 in Benin**

**Background and Methods**

- First COVID-19 case in March 2020
- There have been over 9000 confirmed cases of COVID-19 and 113 deaths in Benin
- Aims:
  - Evaluate fidelity to new guidance and standard operating procedures for implementing MDA during the COVID-19 pandemic in Benin.
  - Describe strengths and challenges in the implementation of the national level SOP, from the perspective of CDDs and MPH personnel
  - Assess the difference in implementation costs for adapted MDA approaches during the COVID-19 pandemic.
- Sites: Glazoue (semi-urban), Karimama (rural) and Boukoumbe (semi-urban)
- Qualitative Data Collection:
  - Focus groups discussions with CDDs
  - Key informant interviews with purposefully selected national, commune, and health center level stakeholders
  - Rapid framework analysis, with coders in Benin and the US
Key Findings & Recommendations

- **Qualitative data:**
  - Theme 1: COVID-19 misconceptions are common
    - COVID-19 does not exist etc
    - CDDs are a source of COVID-19
  - Theme 2: There was a disconnect between administrative levels during restarts
  - Theme 3: In some cases CDDs did not adhere to preventative measures, largely due to reasons beyond their control
    - CDDs report that they were not always provided with adequate PPE.

- **Cost:**
  - Total additional costs associated with COVID-19 precautions, in three communities was $7731 US
    - Additional supervision
    - Hand sanitizer

- MDA coverage was high, with over 80% treatment coverage in each commune
- MDA delivery was challenging due to widespread misinformation
- Perceptions of MDA implementation were different across stakeholders. There was ambiguity regarding how the distribution of PPE was taking place and how to fill in PPE gaps.
- Several opportunities to improve future delivery were identified, including:
  - Focusing on CDD training to dispel myths
  - Focusing on the supply chain of PPE

4) **Evaluation of MDA Restart in Kwara and Kano States, Nigeria**

Background and Methods

- **Due to COVID-19, the World Health Organization suspended all MDA activities**
  - Nigeria stopped MDA in April 2020
  - ESPEN/COR-NTD supported countries to develop SOPs for restarting MDA.
- **Study Aim:**
To document the processes, successes, and difficulties in implementing guidelines to support NTD program restarts and informing policy and program adaptations in other countries and future activities.

**Study Objectives:**
- To gain insight regarding program challenges with adherence to new guidance and SOPs
- Understand the barriers and challenges among community CDDs in the implementation of revised SOPs, including issues with enhanced CDD training
- Understand the communities’ perspective as it relates to the adapted MDA campaign in the COVID-19 context.
- Assess differences in implementation costs for adapted MDA approach

**Study location:** Kano and Kwara - in one urban and one rural LGA
- COVID-19 is documented more in urban compared to rural contexts

**Mixed methods approach**
- Pre and post-MDA key informant interviews with stakeholders at the federal, national, and sub-national levels.
- Advocacy checklist
- Training observation checklists to observe MDA processes.
- CDD interviews and community interviews
- Costing spreadsheet

**Key Findings & Recommendations**

**Key Findings:**
- Urban concentration of cases
- Multiple sectors of the economy affected
- Health sector suspension of services
- The initial fear of the pandemic, lessened by available resources for prevention and management
- Reopened economy and positive community adherence to COVID-19 regulations.

**Cost implications of MDA restart:**
- Travel (for distribution of PPE, supervision activities)
- PPE
- Additional venues for meetings to accommodate social distancing
- Total costs = 75,110 (Naira)

**Practical realities of restarting MDA**
- Adaptations to MDA training
The majority said that it was successful
- Challenges-adherence to preventive measures
  - Due to COVID-19
    - Time was taken to train
    - Pictorial learning aids utilized
    - Preventative Measures were discussed
  - Adherence to preventive measures
    - The majority adhered to the measures
    - Difficulties to social distancing
    - Mainly due to small hall sizes
- Adaptation of distribution
  - House to house distributions utilized for safety - normal in rural areas but adaptations were made in rural areas.
- CDD Challenges:
  - Inadequate supplies of PPE; discomfort with wearing face coverings; stigma; high workload; out-of-pocket expenses.
- Acceptability of MDA in Communities
  - Sensitization, mobilization and COVID-19 led to high acceptance
  - Reasons for refusal were similar to previous MDA
  - Some refused to participate due to a variety of reasons
    - Perceived as COVID-19 vaccines
    - Lack of trust in the health system stemming from fears linked to COVID-19
- MDA Restarts Outcome:
  - The MDA was more successful than previous MDAs
    - Higher geographical coverage
    - Use of health information systems
    - Improved planning, training, and coordination of MDA during the pandemic
- Similar contexts will benefit from this all-inclusive preparatory phase and context applicable messaging:
  - Successes
    - Collaborative decision making in designing context-specific guidelines
    - Promotion of participation and inclusion
  - Challenges
    - Lower level risk assessment could be better articulated
    - Adequate, collaborative and timely planning and budgeting.
5) **Conducting NTD Control Activities in a Pandemic: Experiences from the Asia-Pacific region**

**Background and Methods**

- **Limited work to date has been conducted to look at positive changes/adaptations on programs (anecdotal only)**
- **Research Questions**
  - How has the pandemic impacted NTD Programs?
  - How have NTD programs changed/adapted to continue during the pandemic?
  - Have existing WaSH programs been repurposed or strengthened as a result of the pandemic?
- **Qualitative interviews with:**
  - NTD program managers
  - Ministry of Health Staff
  - WHO
  - People on the ground
  - Conducted via Zoom/MS Teams in English
  - Countries where interviews were confirmed
    - Cambodia, Fiji, Papua New Guinea, Solomon Islands, Timor-Leste, Philippines, and Vanuatu
  - To date, 3 interviews in 2 countries have been completed.

**Key Findings & Recommendations**

- **Preliminary results:**
  - **Pandemic impact on NTD activities**
    - MDA stopped or delayed
    - Surveillance and active case finding through mass screening stopped
    - People unable to seek treatment for NTD-related morbidities
    - Funds and staff for NTD programs are being diverted to the COVID-19 response.
    - Drug supply chain affected
    - Ivermectin emerging as a possible COVID-19 treatment
    - School-based to community-based MDA (STH)
      - Worse MDA coverage in remote areas where long distances between communities.
      - More time and resources
  - **Innovations**
    - Integrating NTDS with other government programs
- Nutrition, education, immunizations
  - Integrate surveillance with door to door MDA
  - Delivery of field training online e.g. teaching health care workers how to use filarial test kits via zoom
- WaSH and Pandemic: Impact
  - In general WaSH (infrastructure and health promotion) under a different government department (not health-related)
    - Poor coordination and integration with NTD/health programs was a common theme
  - Increased resource allocation to health promotion and education for WaSH to prevent SARS-CoV2 transmission.
- Recommendations:
  - Only 3 interviews conducted to date
  - Pandemic has negatively impacted NTDs from resource/funding/staffing perspective
  - A key theme is integration with other programs (resource sharing etc) and finding innovative ways to deliver NTD activities e.g. MDA drugs.
6) **Exploring the impact of COVID-19 on the experiences and wellbeing of Neglected Tropical Diseases (NTDs) Frontline Health Workers and Implementers in Kaduna, Kwara and Ogun States, Nigeria.**

**Background and Methods**

- The current pandemic presents worldwide challenges to health systems, with many NTD services disrupted
- **Aims and Objectives:**
  - To explore the experiences of frontline health workers and the impact of COVID-19 on their wellbeing
  - To identify the challenges faced by health workers regarding workload, stigma, and community perceptions during the pandemic and whether this varies by gender, age, and community.
  - To recommend strategies to support health workers and strengthen the health system in managing NTDs in future outbreaks.
- **Methods**
  - Photovoice
    - Participants were taught about the process of photovoice as a method of data collection and how it can be used to document their experiences and wellbeing
    - Participants take 1-2 photos/drawings per day and record diaries/captions related to the main theme over two weeks
    - Participants shared key photos and captions every day over a 10 day period with the researchers using WhatsApp
  - Focus group discussions
    - Participants presented printed key photos and summarized their meanings.
    - Pictures and findings were developed and produced into a photo booklet
    - Findings were disseminated through a report, photo booklet and recommendations.
  - Analysis
    - Data that was collected was validated, organized, and summarized into themes to reflect the experiences and wellbeing of research participants across the three states.
Key Findings & Recommendations

- 12 emerging themes
  - Fear of contracting COVID-19
  - Stigma
    - Health workers have to deal with stigma from community members.
  - Challenges in providing routine care
    - Health workers could not give routine vaccines
  - Sense of responsibility
  - Added workloads
    - Greater number of patients and inadequate number of staff
  - Lack of resources
  - Environmental health
    - Dumpsites around the community
  - Pride in role
  - Community support
  - Personal impacts
    - Could not go to church
    - Friends or family passing away
  - Gendered impact
  - Food and insecurity
    - Prices of food increased

- Recommendations:
  - Provision of necessary equipment and materials like hand gloves, sanitizers, cotton wools and antiseptics to help ease the work of health workers
  - Capacity-building should be done on a regular basis to aid health workers with updated knowledge and improve their performance
  - Support for transportation for health workers to help them access their facilities easily.
  - Create a support network for health workers where they can share their experiences and issues affecting them and how to heal each other.
  - Continuous health education and awareness on hygiene practices to patients and the public even after the COVID-19 pandemic
  - Recruitment of more frontline health workers to ease the workload burden
  - Provide enumeration and create income generation opportunities
7) **Determinants of willingness to work among NTD implementers during Health Shocks: case of Implementers in Ogun State during the COVID-19 pandemic**

**Background and Methods**

- COVID-19 put a stop to major NTD interventions and affected the delivery of NTD services at the health facility level.
- Understanding the willingness of NTD workforce to deliver NTD services in the context of COVID-19 is an essential requirement for NTD planners.
- A cross-sectional study across two locations Abeokuta South and Odeda local government areas.
  - Structured paper-based questionnaires were used to collect data
  - Study Sample
    - Randomly selected 10 health facilities, 10 CDDs per facility
    - A purposeful sampling of 3 health workers per facility
    - Total sample size of 260 participants across the two locations

**Key Findings & Recommendations**

- 85.7% of the implementers are knowledgeable about COVID-19 pandemic and how to deliver NTD services during the pandemic
- 80.2% of implementers have positive attitudes towards the covid-19 pandemic
- Overall, 39.9% of implementers are willing to deliver NTD services during the COVID-19 pandemic
- Major factors that influence willingness to work
  - Early coordinated response
  - The significant factors driving unwillingness to work are the risk of infecting families, colleagues dying, children and partners falling ill and risk of self infection.

**Recommendations:**

- There is a need for increased knowledge about pandemics and how to deliver NTD services during the pandemic among implementers
- Sustained structure of training for implementers, proper risk assessment of health shocks should be done prior to deployment of implementers to protect older implementers and their dependents.
- The health systems easily coordinated response to the pandemic is necessary for implementers to be confident and willing to work during the pandemic
Interventions such as the provision of transport, PPEs, antiviral drugs, commensurate hazard allowance, disability allowance and flexible work hours to reduce absenteeism from work during the pandemic.