Perceived barriers and opportunities to offering Ivermectin continuously in the primary health care system: An exploratory study of stakeholders in 5 regions of Cameroon

Lead: Guy Sadeu Wafeu

1. Center for Research on Filariasis and other Tropical Diseases, Yaoundé, Cameroon
2. Institute for Medical Research and Medicinal Plants Studies, Yaoundé, Cameroon
3. National Onchocerciasis Control Program, Yaoundé, Cameroon

October 2022
Overview

### Introduction and Background

- Study Objectives, Methods, and Limitations
- Results
- Promising Practices
- Lessons Learned
- Implications for Policy and Practice and Future Research
Introduction and Background

• Onchocerciasis: Second must important infectious cause of blindness, 21 million infected worldwide (2017).

• Community-directed treatment with ivermectin (CDTI) : main strategy proposed by World Health Organization (WHO) to fight against onchocerciasis in Africa.

• Despite transmission interruption observed in some foci, the disease remains endemic in 60% (113/189) of health districts in the ten regions of the country, with prevalence above 60% in some areas.

• Absences during mass drug administration campaigns community drug distributors (CDDs) failing to deliver the treatment in households : factors for noncompliance
Map of Study Location

- Cameroon: Country located in Central Africa
- 04 Main cultural and geographical areas: Sahelian (Far North, North and Adamawa), Forest (South, Est, Centre), Grass field (West, Nord west), Coastal (Littoral, South West)
- Study conducted in 10 Districts (White cycles on chart), in 04 cultural areas,
Study Objectives and Research Questions

• **Objective:** To assess the challenges encountered in a continuous ivermectin distribution through local health facilities after mass drug administration campaigns, as well as the opportunities that may serve as leverage for the integration of ivermectin administration into the PHC system.

• **Research Questions**
  • **Primary Question:** What are challenges and opportunities of partial integration of ivermectin mass drug administration into the primary health care system?
  • **Secondary Question:** What is the cost-effectiveness of ivermectin mass drug administration through campaigns?
Methods

• Mixed qualitative and quantitative study design, conducted from March 2022 to September 2022

• Qualitative data collected through in depth interview and focus group discussion of key stakeholders at Central, Regional, District and Health areas levels. Participants were key stakeholders of onchocerciasis control program.

• Quantitative data on cost and other resources required for the 2021 Campaign collected from Districts’ report

• Consolidated framework for implementation research used to design the questionnaire and analyze data. Conceptual framework describing responsibilities at different levels during integration conceived.

• Content analysis used for qualitative data using Atlas.ti, summary statistics used for quantitative data.

• Ethical Approval obtained from CAMBIN
Results

- 259 Participants included (98 in depth interviews and 20 FGD)
- Opportunities: Good knowledge about CDTI and onchocerciasis, willingness to take the drug, integration see as a simple and sustainable approach,
- Challenges: management of adverse events, risk of misusage of IVM for other purposes, lack of motivation of CDD
- Administrative drug coverage: 81.5%, Cost per person treated: 53 CFA Francs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Count</th>
<th>Percentages (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of participant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOCP permanent secretary</td>
<td>01</td>
<td>0.4</td>
</tr>
<tr>
<td>NGOs Staff</td>
<td>02</td>
<td>0.8</td>
</tr>
<tr>
<td>Regional Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regional delegate</td>
<td>02</td>
<td>0.8</td>
</tr>
<tr>
<td>Focal Point for NTDs in Region</td>
<td>06</td>
<td>2.3</td>
</tr>
<tr>
<td>District Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>District Medical Officer</td>
<td>08</td>
<td>3.0</td>
</tr>
<tr>
<td>Focal point for NTDs in Region</td>
<td>10</td>
<td>3.9</td>
</tr>
<tr>
<td>President of District dialogue structure</td>
<td>10</td>
<td>3.9</td>
</tr>
<tr>
<td>Health area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Health area</td>
<td>20</td>
<td>7.7</td>
</tr>
<tr>
<td>President of Health area dialogue structure</td>
<td>19</td>
<td>7.4</td>
</tr>
<tr>
<td>CDD</td>
<td>20</td>
<td>7.7</td>
</tr>
<tr>
<td>Community members*</td>
<td>161</td>
<td>62.2</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>205</td>
<td>79.1</td>
</tr>
<tr>
<td>Female</td>
<td>54</td>
<td>20.9</td>
</tr>
</tbody>
</table>
Promising Practices

- Keep Ivermectin available in Health facilities for a three months period after the Campaign to supply those who missed the mass drug administration.
- Provide incentive for CDDs motivation and to cover the transport fees during Campaigns.
- Sensitize populations through CDDs and community radios on low rates of adverse events, and giving well in advance accurate information about IVM-MDA.
Lessons Learned

During campaigns, some community members refused to take the drug because they have a personal conflict with the CDDs.

Some CDDs are unable to cover their area of distribution of IVM due to very large geographic area, tiredness and lack of reimbursement of transport fees.

Some people are not aware of the upcoming campaign so might travel during the period.
Implications for Policy, Practice and Future Research

• The data show promise and potential in integration of ivermectin in the primary health care system, especially for sustainability of higher coverage levels of ivermectin along the population, leading to elimination.

• The next steps are to conduct a trial assessing the impact of partial integration on drug coverage and cost effectiveness of IVM-MDA.

• This study at the community and health system levels has uncovered key components of current campaigns that need to be strengthened immediately, namely the need for more sensitization on the low rate of adverse events related to IVM in recent years, as well as sensitization to the community,
Summary of Key Messages

Partial integration of ivermectin (IVM) into the PHC System is perceived by stakeholders and community members as a simple and easy-to-implement approach, with stakeholders at different levels highly motivated to try it.

Adding continuous distribution of IVM in health facilities to usual MDA campaigns also represents an opportunity to sustain IVM administration in case of funding shortages.

Motivation of CDDs, management of adverse events and risk of misuse of IVM are key challenges identified. They can be addressed by involving the same CDDs in other health programs, by using the same resources as during MDA campaigns to manage AEs.
THANK YOU.