The Gambia and Senegal

A model for cross border cooperation in malaria control

34th SMERG Annual Meeting, Bangkok, May 2023
Presentation plan

1. Introduction
2. Legal framework for border cooperation
3. Synchronization of the 2019 and 2022 LLIN campaigns
4. Malaria surveillance in border areas
5. Perspectives
Senegal and The Gambia, 2 West African countries that share 740 km of common land border. The border area includes:

- 07 Senegalese regions
- 06 Gambian health regions
- 75 Senegalese health posts
- 84 Gambian health posts
- 1454 Gambian villages
- 350 Senegalese villages
- 2 official languages: French and English
Process of cross-border collaboration

2018
Signature MOU

2019
Net distribution campaign

2020
PECADOM border

2021
Sharing of SOPs and collection tools for surveillance / response

2022
Net distribution campaign

"Together Toward Elimination!"
Which legal framework for a successful border cooperation?
Commitment of the parties to promote and implement a technical cooperation called “Senegambian Malaria Initiative in the border regions”
The 11 commitments (1/3)

1. **Coordination et cooperation**
   - Coordinate and cooperate with other technical and donor partners to develop evidence-based cross-border control strategies and to continuously monitor and evaluate impact.

2. **Resource mobilization**
   - Mobilize financial resources from governments and external donor partners to support the Initiative.

3. **Identification of focal points**
   - Identify focal points in each country who will facilitate and support the routine activities of the Initiative.

4. **Information sharing**
   - Share scientific, technical and administrative information and promote exchange between health professionals.
The 11 commitments (2/3)

5. Interactions
   Facilitate all interactions and obtain approvals and concessions necessary for the successful implementation of the Senegambian Malaria Initiative strategies.

6. Harmonization
   Harmonize LLIN distribution to maximize coverage for broader community protection.

7. Indoor Residual Spraying
   Application of IRS by the NMCP of The Gambia to cover communities in border areas located 3 kilometers from Senegalese territory not covered by the NMCP of Senegal.

8. Facilitation
   Facilitate cross-border procedures for rapid access to essential commodities for communities through the joint use of available human resources and the organization of related activities.
Authorize the exchange of inputs between the two countries (LLINs, medicines, RDTs, other products, etc.)

Share expertise and experience in malaria control; for example, community-based malaria case management and investigation, and management of indoor residual spraying.

Share data on the transmission and spread of the disease for a rapid cross-border response.
Synchronization of the 2019 and 2022 LLIN mass distribution campaigns
2019 - Synchronized LLIN distribution campaign
First experience of cross-border collaboration
Synchronization with Gambia

- Senegalese-Gambian cross-border malaria initiative supported by the Global Fund
- Target villages: about 2 km from the Gambia border and 5 km from the Senegal border
- Planification/Coordination
- Synchronized activities
  - Communication
  - Census/Distribution
  - Face to face meeting
  - Joint supervision
  - Inter-district evaluation
  - Joint evaluation of NMCPs
Synchronization of a mass bednet distribution campaign across international borders: An emerging model from The Gambia and Senegal

Gadiaga L1, Kandeh B2, Kouletio M,2 Rousselie V3, Sene D1, Cisse M4, Diouf ML, Penard F4, Ba Fall F4, Erskine M4, Diouf MB2

INTRODUCTION

With malaria incidence rates at pre-elimination levels and intense shared border land, and population mobility, the Senegal-Gambia Malaria Elimination Initiative was enacted by the Ministries of Health of these two nations in recognition of the necessity to scale up and align evidence-based interventions across the cross-border. A first step under this initiative was the establishment of joint taskforces at the organization of the first known, cooperative effort by two governments, to synchronize mass bednet distribution campaigns on both sides of an international border.

RESULTS

During 30 day distribution campaign starting April 15, 2019, a total of 4,172,099 nets were distributed with 92% of coupons exchanged for baskets in the Gambia and 98% in Phase 1 region of Senegal.

At least 30 communities engaged in specific collaborative activity during the active stages of the campaign to improve coverage and efficiency.

Three cross-border collaboration platforms were initiated to foster health system exchange across districts for malaria but also HIV and TB follow-up.

SYNCHRONIZATION STEPS

5 Established legal, judicial agreement for collaboration between Ministries of Health of both countries through an MOU
2 Aligned the macro timing of campaigns, moving Gambia’s 1 year earlier to match Senegal’s three-year cycle
3 Reviewed operational plans to harmonize bednet type (color, material, size), household definition and communication plans and materials
4 Set identical start dates for campaign stages of household registration and bednet distribution and established methodology for starting all activities on day one along the border focus communities
5 Mobilized governors, police, immigration, and customs to facilitate cross-border collaboration
6 Matched health facility catchment areas and mapped communities within the cross-border region (defined as range from 2.5 km on either side of the international border) by local authorities with support of the U.S. Peace Corps
7 Constructed ArcGIS map, incorporating administrative boundaries, settlements, and health facilities and analyzed distance between facilities and settlements as well as geographical landmarks to select based on three criteria:
   - Type 1: Hard to reach transport support – more than 15 km from own health facility but less than 25 km from neighbor’s facility
   - Type 2: Shared communities – joint distribution in settlements that straddle both sides of the border
   - Type 3: Geographical barriers – facilitated border crossing for campaign teams to improve access to settlements with decreased number of cross-border movements
8 Established cross border focal points and jointly supervised sites before and during campaign. International opening ceremony with Ministers of Health on both the border.

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AN ENABLING ENVIRONMENT FOR COLLABORATION: The full support of the Ministries of Health and the major campaign funding partners was critical to the achievement of this synchronized campaign. As an example, The Gambia successfully leveraged with the Global Fund to deliver its nets one year earlier than its three-year cycle to align with Senegal’s schedule.

AGILITY REQUIRES FLEXIBILITY IN CAMPAIGN CHRONOGRAMS: True synchronization requires that all training and logistics are ready for campaign teams on both sides of the border. In this case, not all distribution activities occurred in all villages in the cross-border area on day one due to operational differences in the management staff of the campaign.

COMMUNICATIONS WITH THE OPERATIONAL LEVEL: Most communication is an intensive and daily exchange of communication within a country’s administration hierarchy. However, when planning joint actions across countries, care is needed to ensure that actors of the operational level are aware of modifications pertaining to their sites. Some regions found creative ways to improve real-time communications across teams through cross-border exchange visits with their counterparts and WhatsApp group networks to reduce communication costs.

MAPPING TOOLS NEED TO BE INTERFACED WITH LOCAL USERS: Mapping helped to bring together complex information about the relations of boundaries, infrastructure, geographical features and communities for decision-making; however, local users are needed to contribute to this information early in the process. The introduction of mapping opened multiple opportunities to improve campaign management (including spatial performance tracking, cross-border surveillance, and timely exchange of information in cross-border region where knowledge of roadways maybe less well known.

KEEP A LONG-TERM PERSPECTIVE ON PURPOSE: Acknowledge that the purpose of the synchronized campaign was to build international collaboration for malaria elimination as well as to ensure coverage of nets across all cross-border populations. Specific intensive cross-border actions such as training and joint implementation are only one manifestation of this goal.

CONCLUSIONS

In addition to setting a common goal and fostering political will, between countries, effective collaboration across multiple bilateral donors is important to optimize financial and technical resources. The permanent Senegambia secretariat scope needs to include malaria elimination initiative to strengthen partnership. Further, the lessons learned from this joint campaign will help other countries that could benefit from similar cross-border malaria control initiatives.
1- Meeting on cross-border mapping with police and customs administrative authorities, Kolda, January 2019

2- Meeting on message harmonization, Banjul, March 2019
2022 Synchronized LLIN distribution campaign
Campaign in synchronization with Gambia

<table>
<thead>
<tr>
<th>Results</th>
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<tbody>
<tr>
<td>Total number of LLINs distributed</td>
<td>100 757</td>
</tr>
<tr>
<td>Number of households that received LLINs</td>
<td>16 111</td>
</tr>
<tr>
<td>Number of villages</td>
<td>255</td>
</tr>
<tr>
<td>Total number of persons in households</td>
<td>174 050</td>
</tr>
</tbody>
</table>

Cérémonie de lancement de la campagne synchronisée CDM CUMIL 2022

12 Senegalese districts bordering The Gambia

6 Gambian regions bordering Senegal
Joint supervision of activities at all levels

Digitization of the campaign (border districts in Senegal and the whole of The Gambia)

Establishment of a platform to visualize the data of the 2022 LLIN Campaign
Résultats des campagnes synchronisées

Cross-border collaboration

- Synchronization allowed for satisfactory coverage
- Good geographical coverage of villages (no villages forgotten)
- No duplication in distribution
- Better management of people's choices and preferences (harmonization of colors and types of LLINs)
Malaria surveillance in cross-border areas
2019
PECADOM
Frontalière
Organization during the period of high malaria transmission (July to December) of sweeps of Senegalese villages bordering The Gambia.

Door-to-door visits by DSDOMs once a week to detect, test, and treat or refer each suspected case of malaria, diarrhea, or ARI.

3 districts bordering The Gambia were selected to implement the PECADOM+ strategy.
Goal
To contribute to the achievement of the malaria elimination goal in Senegal and The Gambia through cross-border control

Objectives
- To strengthen the PECADOM Plus strategy in the villages bordering The Gambia
- To support the NMCP in monitoring and coordinating the implementation of the cross-border control plan
Districts, posts and sites PECADOM

DS Vélingara (4)
PS Sinthian Koundara (5)
PS Nemataba (5)
PS Doubirou (1)
PS Medina Marie Cisse (1)

DS Médina Yoro Foulah (8)
PS Badion (6)
PS Dioulanghel Banta (3)
PS Dinguiraye (2)
PS Ngoudourou (4)
PS Pata (3)
PS Touba Thiecken (3)
PS Bouruco (2)
PS Saré Yéro Bouya (1)

DS Maka Colibantang (5)
PS Saré Diamé (8)
PS Mboulembou (1)
PS Soubacounda (6)
PS Cissécounda (4)
PS Seoro (2)
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<tr>
<th>ANNEES</th>
<th>Moins de 5 ans</th>
<th>Plus de 5 ans</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>Total Cas de fièvre</td>
<td>TDR réalisés</td>
<td>TDR +</td>
</tr>
<tr>
<td>2019</td>
<td>1607</td>
<td>1607</td>
<td>332</td>
</tr>
<tr>
<td>2020</td>
<td>1716</td>
<td>1716</td>
<td>244</td>
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<tr>
<td>2021</td>
<td>1919</td>
<td>1919</td>
<td>288</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5242</td>
<td>5242</td>
<td>864</td>
</tr>
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**Results of the Border PECADOM**
2022
Development of harmonized case and outbreak investigation tools for malaria elimination surveillance
Main objective
Begin surveillance and response activities for malaria elimination

Specific objectives
- Share case-based surveillance and response SOPs in Senegal
- Adapt case-based surveillance and response SOPs for The Gambia
- Validate case-based surveillance and response SOPs for The Gambia
- Share case-based surveillance and response tools and weekly reporting system data collection tools
- Adapt case-based surveillance and response tools and weekly reporting system data collection tools
- Validate case-based surveillance and response tools and weekly reporting system data collection tools
<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finalization of SOPs</td>
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<tr>
<td>Validation des PON</td>
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<tr>
<td>Development of the DHIS2 Tracker program</td>
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<tr>
<td>DHIS2 Monitoring Program</td>
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<tr>
<td>Configuration of the input (telephone form,...)</td>
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<tr>
<td>Training of health workers</td>
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<tr>
<td>Case documentation</td>
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<tr>
<td>Case Investigations</td>
</tr>
</tbody>
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Perspectives

• Synchronization of Seasonal Malaria Prevention Chemo (SPC) campaigns

• Synchronization of mass drug administration (MDA)

• Cross-border surveillance integrating entomology

• Establishment of cross-border collaboration frameworks with other countries (development of action plans within the framework of the GC7): Mauritania, Guinea Bissau, Guinea and Mali
Thank you for your kind attention