Building the links between campaigns and PHC: Evaluating serosurveillance and PHC referral during integrated NTD campaigns in Vanuatu

Project Lead: Julie Jacobson
Presenter: Anastasia Pantelias
Organization: Bridges to Development
Partners: Western Pacific Regional Office of the WHO, Vanuatu Ministry of Health, Kirby Institute

August 2022
## Overview

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction and Background</td>
</tr>
<tr>
<td>Study Objectives, Methods, and Limitations</td>
</tr>
<tr>
<td>Results</td>
</tr>
<tr>
<td>Promising Practices</td>
</tr>
<tr>
<td>Lessons Learned</td>
</tr>
<tr>
<td>Implications for Policy, Practice and Future Research</td>
</tr>
</tbody>
</table>

**HEALTH CAMPAIGN EFFECTIVENESS**

*Strengthen Systems. Maximize Impact.*

**A program of**

**THE TASK FORCE FOR GLOBAL HEALTH**
Introduction and Background

As part of a larger implementation project, the Vanuatu Ministry of Health (MoH) piloted a new integrated MDA approach in Tafea Province:

1. Integrating an MDA campaign targeting yaws, scabies, and soil-transmitted helminths, with skin exams and referral to the primary health care system
2. Conducting integrated surveillance for multiple disease targets alongside the MDA
Vanuatu is one of the first countries to eliminate lymphatic filariasis with a strong national and provincial capacity to implement community outreach activities. A highly committed NTD team is working on the elimination of yaws and leprosy & control of scabies and soil-transmitted helminths. They have submitted their dossier to the WHO to validate the elimination of trachoma as a public health problem.

Tafea province, the site of our project, is the southernmost of the six provinces, with a population of 36,799 people, consisting of 5 islands, some of which are among the most isolated in Vanuatu.
Study Objectives and Research Questions

Project Objectives:
Support Vanuatu’s goals to eliminate and control Yaws, Scabies, STH and Leprosy by:

1. Testing the feasibility of creating a **referral pathway between the community - based MDA campaigns and the PHC system** by integrating skin exams and referral to PHC centers with the MDA campaign

2. Testing the feasibility of leveraging routine M&E for MDA campaigns to collect samples for **integrated serosurveillance** targeting multiple cross program and emerging health priorities to help inform country level decision making

<table>
<thead>
<tr>
<th>Disease</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yaws</td>
<td>Eliminate</td>
</tr>
<tr>
<td>Scabies</td>
<td>Eliminate</td>
</tr>
<tr>
<td>STH</td>
<td>Control</td>
</tr>
<tr>
<td>Leprosy</td>
<td>Eliminate</td>
</tr>
</tbody>
</table>
Methods

The project was conducted during the MoH’s MDA campaign in Tafea Province November / December 2021

All protocols received ethics approval from the Vanuatu Ministry of Health and the University of New South Wales, Australia.

DBS: Dried blood spots
DPP: Dual Path Platform rapid diagnostic test for yaws
PCR: polymerase chain reaction
MDA: Mass Drug Administration
Methods

Limitations:
- **COVID lockdowns** affected ability to 1) ability to conduct follow-ups on skin cases and 2) conduct in-person interviews and focus groups
- Computer literacy, connectivity, & access to **technology**
- **Language** barriers
- **Timeline** constraints affected ability to analyze DBS samples

Evaluation of feasibility of integrated approach:
- Survey conducted 6 months after the MDA campaign
- Developed on an online platform
- Administered in Bislama (local language)
- Disseminated via link/online & in person with support of trained MoH staff, for those with no access to technology.
- Evaluation targeted MDA supervisors, nurses, village health workers, lab officers, microscopist, community health volunteers, and Public Health Officers.
Results

First round of MDA - Skin lesion referral

Population of Tafea province = 36,779

COVID-19 vaccine a & MDA hesitancy – Feasibility survey results

N=15

“There is much confusion due to false information in social media and also the influence of leaders in the community”

“Some people say MoH will change the vaccines into tablets for people to take.”
Results

"there is complete information inside the leaflet"

"Integration helps reduces diseases" & "helps stop the spread of diseases"

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Target</th>
<th>Results (% of target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The job aids helped determine if a nurse consultation was needed (N=8)</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>The MDA leaflet was helpful during MDA (N=8)</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>The training on skin diseases helped understand when a community member should be referred to the health center for additional care (N=9)</td>
<td>44.44%</td>
<td>66.67%</td>
</tr>
<tr>
<td>Integrating skin exams and referral with the MDA campaign is a valuable health service for our communities (N=9)</td>
<td>33.33%</td>
<td>50%</td>
</tr>
<tr>
<td>Conducting skin exams in the community and referring cases of severe skin disease to the health centers for care is a valuable health service for our communities. (N=8)</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

HEALTH CAMPAIGN EFFECTIVENESS


A program of

GLOBAL HEALTH TASK FORCE
Results

Survey Results

- Preparedness to act as per your given role in the MDA integrated mass campaign (N=23):
  - Very Prepared: 4.37%
  - Somewhat Prepared: 86.96%
  - Not Prepared: 8.70%

- Preparedness to respond when community members reported having skin diseases (N=8):
  - Very Prepared: 100%

- Preparedness to perform skin examinations during the MDA campaign (N=9):
  - Very Prepared: 11.11%
  - Somewhat Prepared: 55.56%
  - Not Prepared: 22.22%

- Preparedness to evaluate which community members with skin disease should be referred to the health center for additional care or follow-up (N=9):
  - Very Prepared: 22.22%
  - Somewhat Prepared: 55.56%

"We need refresher training before MDA"

"Population coverage is too big, team members are limited and there is only 1 nurse in a team"

<table>
<thead>
<tr>
<th>Target</th>
<th>Results (% of target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>31 (36.90%)</td>
</tr>
</tbody>
</table>
Results

<table>
<thead>
<tr>
<th></th>
<th>Target</th>
<th>Results (% of target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey</td>
<td>1700</td>
<td>1462 (86%)</td>
</tr>
<tr>
<td>Dried blood spot</td>
<td>293</td>
<td>243 (83%)</td>
</tr>
<tr>
<td>Stool sample</td>
<td>731</td>
<td>149 (20%)</td>
</tr>
</tbody>
</table>

"Due to cultural barriers, people are ashamed to provide stool samples, and do not have the urge to pass stool in the morning."

"People from Tanna are afraid of black magic"
Lessons Learned

**Lack of skin specialist:**
Vanuatu has no dermatologists or dermatology clinics, limiting the ability to refer skin patients to higher levels of medical care. Health workers were trained to diagnose and treat skin diseases; however, the project found the training not adequate. New training modules were developed using a scenario-based, experiential, peer-to-peer format.

**Over-referral of patients:**
300+ cases of skin diseases were referred to the PHC system, most of which were cases of scabies that did not require a referral. The over-referral of cases contributed to the health centers inability to attend to all cases. New forms and job aides will be drafted to only focus on yaws and leprosy.

**Spill-over of vaccine hesitancy:**
There is a necessity to be aware and learn about other community-based programs happening in the country and the knock-on effect that misinformation around vaccines is having on other campaigns.
Promising Practices

Provide health workers and nurses practical and in-depth training on conducting screening and exams for skin diseases to allow for effective integration into MDA campaigns.

Expand the reach of M&E activities for MDA by integrating DBS collection for serosurveillance to gather data on disease targets of interest to the MoH including and beyond NTDs.

Incorporate participatory and peer-to-peer approaches to learning into health worker training to enable dialogue between programs and clinics, ground the training in health worker experience, and highlight key needs of clinics.
## Implications for Policy, Practice and Future Research

<table>
<thead>
<tr>
<th>Implications</th>
<th>More research...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrating PHC activities</strong> such as screening and other routine health care</td>
<td>Is needed to understand capacity-building needs (i.e., training) and resources (i.e., specialists, medicines, etc.) on the PHC side to ensure positive outcomes for integrating PHC activities into MDA campaigns</td>
</tr>
<tr>
<td>into MDA campaigns is feasible and can extend reach of PHC system into hard-</td>
<td></td>
</tr>
<tr>
<td>to-reach communities;</td>
<td></td>
</tr>
<tr>
<td><strong>Integrating collection of dried blood spots</strong> for multi-disease serosurveillance is feasible;</td>
<td>Is needed to increase the acceptability by community members of providing stool samples</td>
</tr>
<tr>
<td><strong>HCW training</strong> that is scenario-based, peer-to-peer, and experiential as</td>
<td>Is needed to validate this approach</td>
</tr>
<tr>
<td>the potential to improve learning outcomes;</td>
<td></td>
</tr>
<tr>
<td><strong>MDA campaigns may need to incorporate a social media monitoring strategy</strong></td>
<td>Is needed on strategies to prevent and diminish hesitancy; and to adapt to new communication strategies in MDA campaigns.</td>
</tr>
<tr>
<td>to address circulating rumors and misinformation that could affect MDA</td>
<td></td>
</tr>
<tr>
<td>acceptability</td>
<td></td>
</tr>
</tbody>
</table>
A program of

Summary of Key Messages

MDA campaigns can be used as a platform to deliver other PHC campaigns and for a better connection between routine health care and PHC.

Integrating campaigns with PHC requires effective training and an in-depth analysis of the health system capacity.

Implementing new communication strategies and being aware of different campaigns in the country can avoid hesitancy and increase the number of participants in the MDA campaign.
THANK YOU.

Bridges to Development
- Julie Jacobson
- Anastasia Pantelias
- Alan Brooks
- Isis Umbelino
- Maria Dreher
- George Taleo (consultant)

WHO - Western Pacific Regional Office
- Sunghye Kim
- Aya Yajima

Vanuatu Ministry of Health
- Fasihah Taleo
- Prudence Rymill

Kirby Institute
- Susana Vaz Nery

With funding from:
- The Task Force for Global Health, Health Campaign Effectiveness Coalition
- Takeda Pharmaceuticals Ltd., Global CSR Program.