

Building Programs to Eradicate Toxoplasmosis Part IV: Public Health

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Supplement: compilation of contributors' original research, writing, and presentations

Authors' note: Most of the materials in this supplement come from independent investigations conducted by students who were affiliated with global health research programs at the University of Chicago. As more student contributors were graciously invited to work with individuals and institutions in Panama and Colombia, the research that these students completed and presented became part of a truly international public health initiative, one that quickly involved more institutions and collaborators than many of us had originally conceived. None of these projects would have been possible without the collaboration of numerous U.S. and in-country partners. As such, each contributor's principal partners are highlighted in the title page of each section in this supplement.

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Vishan Dhamsania, Nick Graves, Marci
Kirchberg, and Kopal Mathur

with Mariángela Soberón Felín, JD; James McAuley, MD, MPH; Rima
McLeod, MD

**“Developing a Framework for
Assessing Panama’s Indigenous
Communities:
Forming Relationships to Advance
Toxoplasmosis Screening”**

Case Mentor: Dr. Rima McLeod

Group:

▲ Vishan

▲ Dhamsania

▲ Nick Graves

▲ Marci

▲ Kircheng

▲ Kopal Mathur

PROBLEM DESCRIPTION

Disease background



Ingestion of sporozoites in oocysts
Or bradyzoites in cysts

Water and soil that have oocysts are also important sources of contamination

Challenges



- ❑ Cause: Parasite *Toxoplasma Gondii*; mother to fetus
- ❑ Effects: Significant neurologic and ophthalmologic damage
- ❑ Sero-prevalence: Estimated 50% in Panamanian women of childbearing age
- ❑ Screening: Available but concentrated in Panama City (80% of population); Inconsistent rates
- ❑ Expansion of outreach interventions to the rural areas and certain communities
- ❑ Limited access to public healthcare systems by the indigenous population
- ❑ Resulting in poor health outcomes - infant mortality 3x higher than the national rate

TARGET POPULATION: EMBERA INDIGENOUS GROUP

- **Size:** Total indigenous population of 194,166 (1.1.8% of total Panamanians); out of which 35,000 Embera population
- **Location:** Spread across country, but established in Darien (~15,000 still living there)
- **Characteristics:**
 - Organized into small social groups
 - Noko= chief, committees on health and “women’s issues”
 - Unique language, many are bilingual
 - No formal “religion”
 - Traditional medicine, private life, importance of having space respected
 - Slash/burn agriculture, live in open air huts



SCOPE

We seek to address the issue of gaining access to the Indigenous population of Panama, with the long term goal of providing more consistent prenatal care to Include screening for Toxoplasmosis

Context

- Create guidelines on “how to develop relationships with indigenous groups”
- Propose new interventions or use of existing ones
- Explore public vs. private sector partnerships

Environment

- Perspectives at individual, community and country level
- Partner with existing groups or health workers



POSSIBLE APPROACHES

**Access via Government
(MINSA)**

Use government programs
and resources to deliver
healthcare to Embera and
integrate health activities

Access via NGOs

Partner with existing NGOs to
build relationships and gain
access to the communities

EVALUATION CRITERIA

FACTORS

- ◆ Political
- ◆ Economic
- ◆ Cultural
- ◆ Sustainable

CRITERIA



Disadvantage



Unequivocal



Definite advantage

POLITICAL



salud
Ministerio de Salud
Panamá

	MINSA	NGO
Political Viability (e.g. need & political will)		
Legal Support & Statutes		
Areas of Conflict (e.g. disputes between parties)		

ECONOMIC



	MINSA	NGO
Human resources		
Costs and overall funding security		
Economic benefits for Embera		

CULTURAL



	MINSA	NGO
Cultural Norms		
Language		
Community Involvement		

SUSTAIN- ABILITY



	MINSA	NGO
Capacity Building & Continuous Training		
Monitoring, Evaluation and Feedback Mechanism		
Incentives		

PUTTING THE CRITERIA TOGETHER

	MINSA	NGO	Both
Political			
Economic			
Cultural			
Sustainability			

PARTNERSHIP OFFERINGS

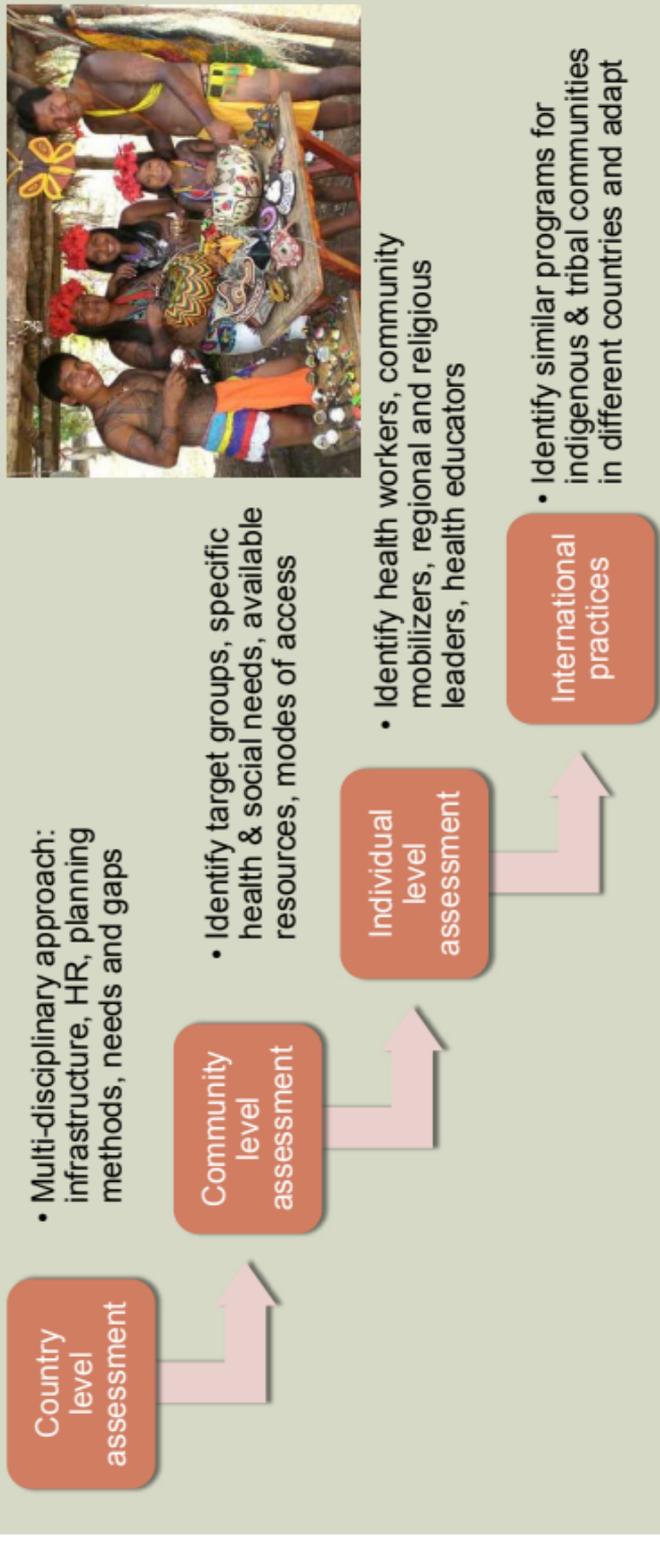
MINSA

- Stable funding
- Long term goals
- Language requirements, capabilities
- Capacity building of NGO workers
- Robust overall M&E
- HR & other available resources

NGOs

- Will & manpower
- Flexibility
- Capacity building of community workers
- Implementation & Service delivery

STEPS FOR ASSESSMENT



WHO TO CONTACT & WHAT TO ASK?

Federal government

- MINSA branches: Funding, structure

Donor organizations

- Current funding allocations and future opportunities

Medical schools

- Faculty: Research, community engagement and partnerships

NGOs

- Ciudad del Saber: Reach and programs

Local hospitals

- Hospital administrators: Outreach

Community health workers

- Perspectives and challenges

Local government

- Cacicque: Funding, structure, receptiveness, culture and roles

LIMITATIONS

- Time limitations made it difficult to obtain primary data
- Little in country experience or community exposure
- Subjective quality of evaluation
- Limited criteria
- Changes in administration and administration priorities
- No current models or data for cost of operations
- Gap between policies and implementation
- Personal relationships are of critical importance

Immediate Recommendations

If a researcher were going to Panama this summer:

1. Introduction and meeting with MINSA, specifically Dirección de Asuntos Sanitarios Indígenas and Commission Nacional de Medicina Tradicional
2. Exploration of Ciudad del Saber entities and identification of NGOs currently working with the Embera
3. Develop a health beliefs and attitudes survey and disseminate to Embera via aforementioned organizations.



Questions?