Malaria Control
in the Adjumani Refugee Settlement

Notre Dame Global Health Case Competition
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Child flipping during his leisure time at the Adjumani Refugee Settlement
Malaria still accounts for half of all inpatient pediatric deaths, and every single Ugandan, more than 37 million people is at risk of contracting the disease. (Child Fund 2016)

925,000: The projected South Sudanese refugee population by December 2017 (S.S. Refugee Response Plan 2017)

Malaria was the cause of 16% of deaths in refugee children younger than five years old (Anderson, 2011)
synergizing existing stakeholders
Emphasis on bottom-up policy
Vector

Host

Parasite

Prevention

Early Diagnosis

Treatment
Vector Parasite Host Prevention Early Diagnosis Treatment

Indoor Residual Spraying Treated Tarps/ Tents
Bed Nets Treated Blankets

Classic Control Mechanisms

Anti-malarial drugs Rapid Diagnostic Tests
Parasite
Host
- Bed Nets
- Faso Soap
- Co-op/women’s group
- partnership with entrepreneurship

Prevention
- Stakeholder
- Early Diagnosis
- Treatment

Bed Nets
- Treated Blankets

Indoor Residual Spraying
- Treated Tarps/ Tents

Faso Soap

Anti-malarial medicines

Rapid Diagnostic Tests

Innovative Solutions

Counterfeit Tests

Breathalyzers for Screening

Innovative Solutions
Innovative Solutions

Community Education

Faso Soap

Mobile Health

Counterfeit Tests

Breathalyzers for Screening
Context/ Goals: Prevention
Activities: Faso Soap
Outcomes: Vector Control
Examples of Indicators: No. of households w/ access to Faso soap & water
Constraints: Integration into local Ugandan communities

Community Education
Mobile health
Women’s groups  Economic Empowerment  Community Integration
**Prevention**
- Faso Soap

**Outcomes**
- Improved Hygiene
  - No. of households w/ access to Faso soap & water

**Constraints**
- Integration into local Ugandan communities

**Early Diagnosis**
- Breathalyzer

**Examples of Indicators**
- Quicker Diagnosis
  - % of correct diagnoses for malaria

**Community Education**

**Mobile health**
Addition to rapid diagnostic testing capabilities
Simple, noninvasive diagnosis of infectious disease
Biomarkers in breath
Devise would be comparable in cost or less expensive than diagnostic tools like RDTs and wouldn't require blood samples or trained personnel to use

| EARLY DIAGNOSIS-Breathalyzers |

Simple  Cost Effective  Noninvasive
$35 billion

122,000
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<th>Activities</th>
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<td>Faso Soap</td>
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<td>Breathalyzer</td>
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<td>% of correct diagnoses for malaria</td>
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<td>Counterfeit Testing</td>
<td>Better quality drugs</td>
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<td>Training VHTs and RSHWs</td>
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Community Education

Mobile health
Refugee Recruitment

Mobile Health / Counterfeit Test Training for RHWs

Early Diagnosis with Breathalyzer

Establish Faso Partnership

Establish Faso co-op

Establish Faso Use

6 months

Recruit and train >75% refugee RHWs

1 year

Use of Counterfeit and Breathalyzer Testing by RHWs

18 months

Establish use of Faso in all Adjumani refugee settlement

2 years

Key:
Prevention
Early Diagnosis
Treatment
Connection to Strategy and Priorities: 2017 South Sudan refugee response in Uganda

1. Protection including emergency response
2. Peaceful coexistence with local communities promoted
3. Sustainable livelihoods improved
4. Social service delivery is integrated with local governments
5. Durable solutions are achieved
"It is a feeling of joy and pride for us and for Africa in general...It also shows that in Africa we are not back(ward) and that Africa's problems can be solved by Africans themselves." -Niyondiko


