Fighting Malaria

A Community-Based Needs Assessment in Ghana
University of Louisville SPHIS

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• **KONG**: Sissala East section of the Upper West Region of Ghana
Needs Assessment Objective

• Assess the beliefs, behaviors, and perceived barriers of community members in the Sissala East district regarding prevention and treatment of Malaria.
Learning Objectives

• Identify facilitating factors and challenges for effective malaria prevention in the Kong community.

• Discuss implications that community input has on PSE changes.
The Kong Community

• Comprised of four sub-communities
  – Hulommale, Balolo, Manabale, and Dangele
  – 2009 pop.-1532
  – 2010 pop.-1547

The Kong Community

- 52% female
- 49% under age 18
- Religious affiliation: 96% Muslim, 3.5% Christian, and .5% Traditionalist.

The Kong Community

- **NO** healthcare providers in Kong
- Closest hospital: Tumu (6 km)
- Three traditional birth attendants and five traditional healers

Methodology

• Data collection:
  – Surveys
  – Interviews
  – Photovoice
Methodology

- Pilot tested survey questions
- Survey questions and photovoice methodology were reviewed by UDS students prior to implementation
- Four to five groups comprised of U of L and UDS students surveyed/interviewed community members
Methodology

- Convenience sample of community members
- Thirty nine adult surveys and 23 child surveys collected over a 3 day period (May 31-June 2 2010)
Methodology

• Four photovoice participants

• Key informant interviews
  – 8 UDS students
  – 1 Traditional Healer
  – 1 Traditional Birth Attendant
Methodology

• Formal community entry

• Community members and UDS students served as interpreters when necessary

• All four areas of community surveyed
How Do You Get Malaria?
Bar Graph Text Description

Reading left to right, horizontally across columns:

• Mosquitos = 37
• Cold/rainy weather = 3
• Dirty water = 2
• Other = 6
How Do You Get Malaria?

Other answers from adult survey

— Severe sunshine (5)
— Hard work (3)
— Unclean environment (1)
— Bad food (1)
How Do You Protect Yourself from Malaria?

Do you sleep under a bed net at night? (Adult)

- Yes, Always: 9
- No: 10
- Sometimes: 20

Do you sleep under a bed net at night? (Child)

- Yes, Always: 3
- No: 4
- Sometimes: 15
Barriers to Bed Net Use

• Can’t afford it (16)
• No access to bed nets (4)
• Don’t like to use or “Feels hot”
<table>
<thead>
<tr>
<th>Adults (of 39):</th>
<th>Children (of 23):</th>
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<tbody>
<tr>
<td>16 – none</td>
<td>10 – none</td>
</tr>
<tr>
<td>7 – 1 time</td>
<td>9 – 1 time</td>
</tr>
<tr>
<td>16 – &gt;1 time</td>
<td>4 – &gt;1 time</td>
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Malaria Frequency in Last 3 Months
Photovoice Component

- Photographs taken by community members
- Capture representation of personal experience with malaria
Problem: “Stagnant water collected from a borehole serves as breeding place for mosquitoes.”

Proposed Solution: “Pour oil in the hole.” and “Use the chief as an avenue for community involvement and adherence.”
Problem: “Shea nuts are brought from the farm to the community. When placed for about 2 to 3 days, it is observed to be full of mosquitoes.”

Proposed Solution: “People’s sleeping quarters should be separate from shea nuts.” and “A place should be organized for housing of the shea nuts.”
**Problem:** “The collection of animal feces, urine, and water lead to the breeding of mosquitoes.”

**Proposed Solution:** “Keep the area clean of elements that attract mosquitoes.”
Main Ideas from Photovoice

• Community members are aware of ideal conditions conducive to mosquito attraction and breeding
  — Stagnant water
  — Storage of shea nuts
  — Unclean environments
Main Ideas from Photovoice

• Environmental and behavioral interventions should be introduced in order to combat mosquito infestation

• The chief’s authority should be utilized in order to increase shared communal responsibility of interventions
Main Ideas from Key Informant Interviews

- Malaria decreases productivity, income generation, and food security
- Malaria hinders development of the community
- Still a need for further education in the prevention and treatment of malaria
Main Ideas from Key Informant Interviews

- Community members clean immediate surroundings to prevent mosquito infestation
- Herbs often used in the treatment of malaria
- Bed nets are used in some homes in the community
## Strengths and Limitations

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Limitations</th>
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<tr>
<td>• UDS students were liaisons to community</td>
<td>• Limited time frame</td>
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<tr>
<td>• Mixed methods approach enriched understanding of needs</td>
<td>• Small sample size</td>
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<td></td>
<td>• Language barriers</td>
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  - Appiah-Amponsah Raymond
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