Prevalence of Insecticide Treated Net Possession and Usage for Child Malaria Prevention Among Rural Ghanaian Women

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*05/07/2009*
Global Burden of Malaria

- Fifth cause of death from infectious diseases worldwide
  - Second in Africa

- Over 1 million deaths annually, mostly among children in sub-Saharan Africa
  - Responsible for 18% of childhood deaths in sub-Saharan Africa (~800,000 deaths)
Background

High levels of ITN use shown to reduce mortality by 17% in children less than 5
Background

- Children living in urban areas are 1.5 times more likely to be sleeping under an ITN than their rural counterparts.

- In homes that possessed ITNs, only 55% of children slept under it the previous night, a WHO study found.
Objective

- To investigate the possession and use of ITNs for malaria prevention in 3 different rural Ghana communities
Methods

- 3 selected sites: Apam, Axim and Mampong
- Women of reproductive age (15-49) who were mothers of at least one child under five years of age
- Convenience sampling used for surveys used a approach
- Sample size was 30 – 60 women per hospital
- Interviews conducted in English and Twi
### Demographics

<table>
<thead>
<tr>
<th></th>
<th>Axim Govt Hospital</th>
<th>Apam Catholic Hospital</th>
<th>Mampong District Hospital</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total respondents</td>
<td>30</td>
<td>37</td>
<td>60</td>
<td>127</td>
</tr>
<tr>
<td>Average age</td>
<td>27</td>
<td>29</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Average # of children per ♀</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Results

Percentage of Respondents Owning ITNs by Site

- Axim: 66.7%
- Apam: 83.7%
- Mampong: 91.6%
- Total: 83.5%

Location
Are You Sure?

Net Ownership vs Usage

- Always: 62.3%
- Sometimes: 24.5%
- Never: 13.2%
Discussion

- Ghana is projected to meet and exceed 2010 target of 60% possession of ITNs
- Majority of the women that own nets use them appropriately
- Younger mothers were less likely than their older counterparts to own nets
Discussion

- Income was not a determining factor for net ownership
- Heat is the most common deterrent to 100% compliance with net use among owners
- Education is the key
Medase!!!

- GE and NMF
- Dr. Renner, Korle-Bu Teaching Hospital
- Dr. Owusu and Axim Government Hospital
- Dr. Ahiable and Mampong District Hospital
- Frieda Ansoanuur, Apam Catholic Hospital
- Dr. Buckle and Mr. Kenneth