

# Attitudes, beliefs, and practices relevant to malaria prevention and treatment in Liberia, 2014

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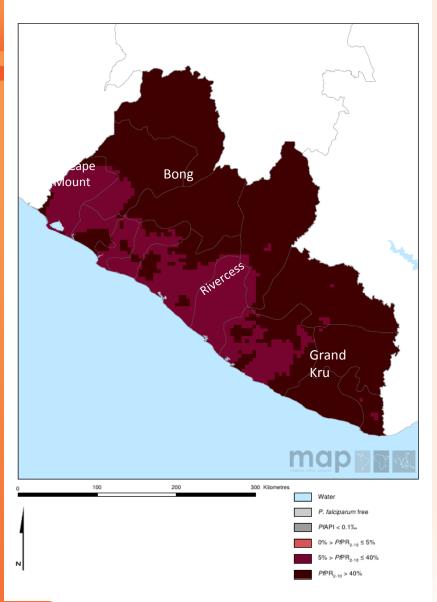
## **Presentation Objectives**

- Examine attitudes and beliefs associated with behavioral outcomes related to malaria prevention and treatment;
- 2. Discuss implications of data for programming, policy and future research.





## **Background**



- Endemicity high but varies across counties;
- Household survey designed and implemented in collaboration with President's Malaria Initiative (PMI) and the Liberia MOH;
- Data collected between March and April 2014 by Subah-Belleh Associates

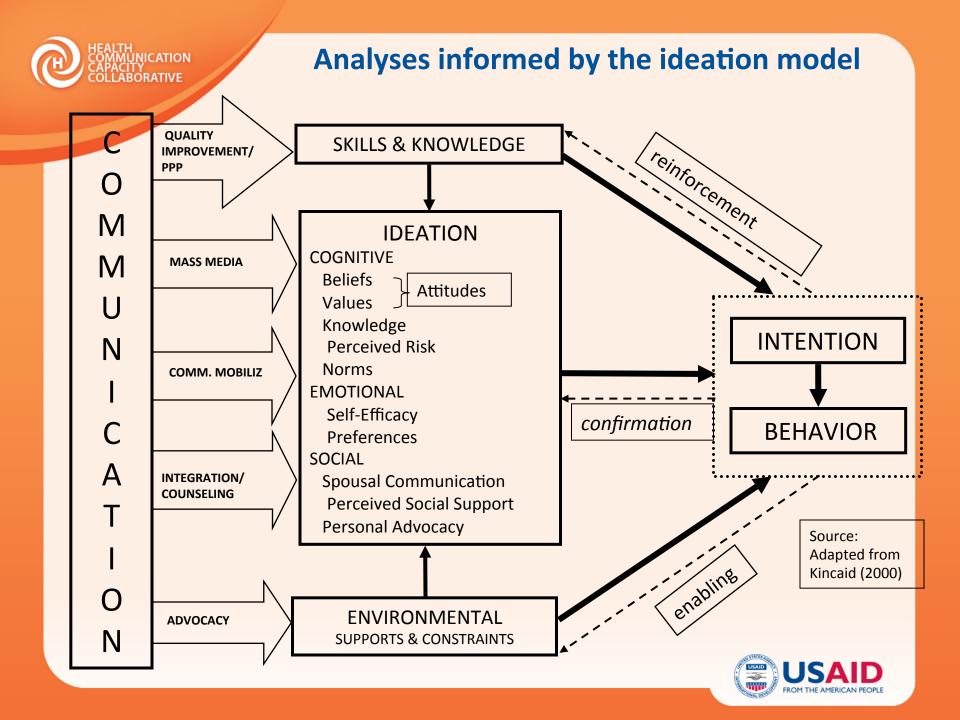




### **Methods**

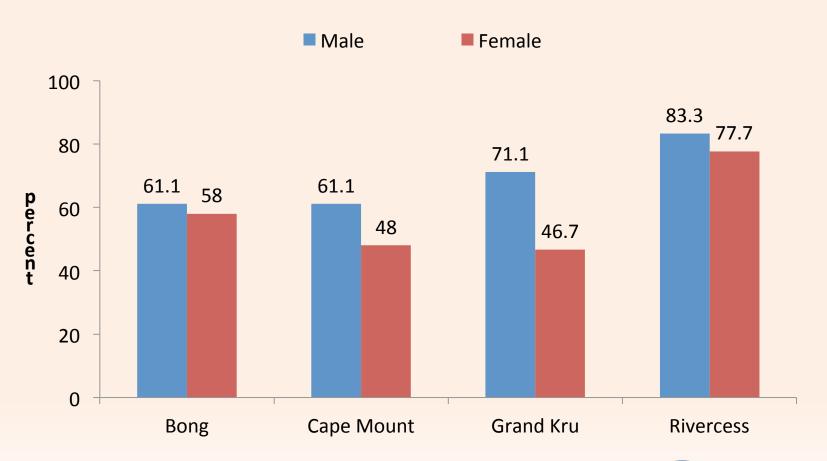
- Cross-sectional survey: 300 households in Bong, Rivercess, Cape Mount, and Grand Kru;
- Sampling of locations proportional to their population within a county;
- Household questionnaire administered to head of households;
- Individual questionnaire administered to 1200 female and 360 male caretakers of children under five;







## Percent reporting weekly listenership of radio by sex and county







# **Exposure to Malaria-Related Campaigns**

- Three quarters of caretakers had heard or seen a message from the "Take Cover" campaign and "Healthy Baby Happy Mother" campaign during the past year
- Reach of messages is higher among caretakers that:
  - are male, have more formal schooling, live in Bong or Rivercess, live in richer households, and listened to radio or TV at least once a week
- Campaigns have the least reach in areas with higher prevalence of malaria in children





## **Malaria-related Ideation and Behaviors**





# **Components of General Malaria Ideation**

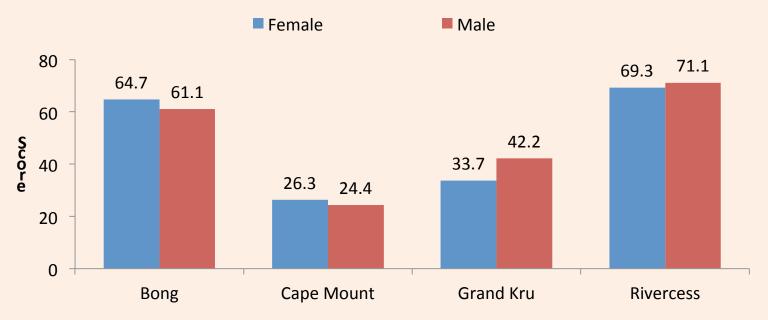
- Malaria knowledge: causes, symptoms, prevention methods
- Perceived susceptibility
- Perceived severity
- Perceived self-efficacy for malaria prevention
- Perceived self-efficacy for severity recognition
- Interpersonal communication on malaria





#### **General Malaria Ideation**

Percent of caregivers with high (positive) general malaria ideation score by county



- Score varied between -1.65 and 0.739, with a mean of 0
- About half of the respondents had a positive general malaria ideation score;
- Odds of demonstrating positive malaria ideation increased with education, married status, and campaign exposure.
- Residence in Cape Mount or Grand Kru, and being Christian are associated with decreased odds of having positive general malaria ideation.





## **Bed net: Ideation and behavior**





# Components of bed net ideation

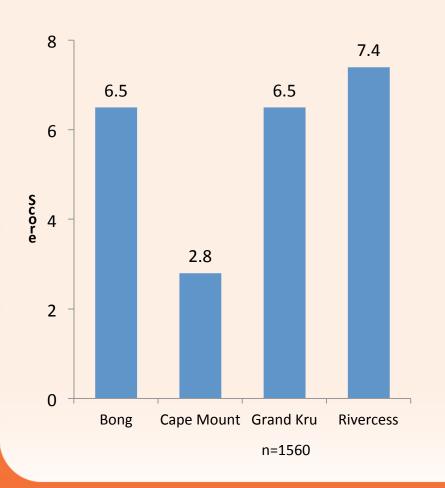
- Awareness of a place to buy nets.
- Willingness to pay for bed nets,
- Perceived self-efficacy for bed net use
- Perceived response efficacy for bed nets
- Attitudes towards bed nets
- Discussion about bed nets,
- Participation in decisions about bed nets,
- Descriptive norm about bed nets;
- Net shape and color preferences





### **Bed Net Ideation**

#### Bed net ideation score by county

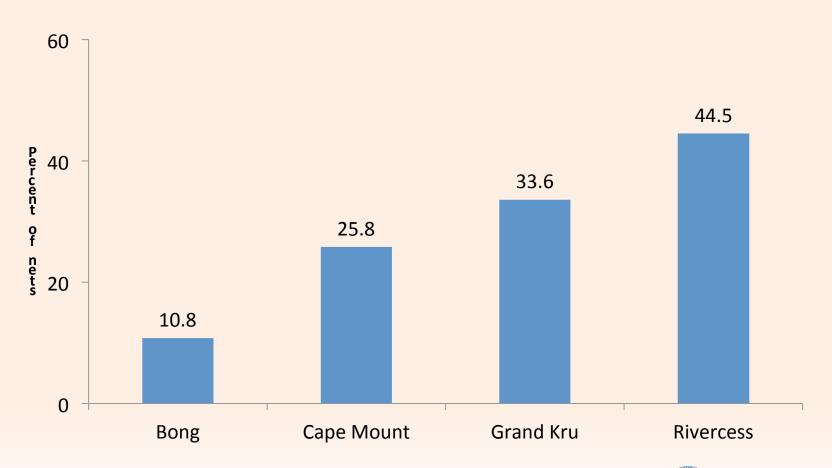


- Overall bed net ideation moderately favorable: score ranges between -14 and 28 with mean of 5.8;
- Lower (less positive)
   ideation score associated
   with residence in Cape
   Mount, poorer households
   and smaller family sizes.





# % of nets in use that are in poor or unsafe conditions, by county

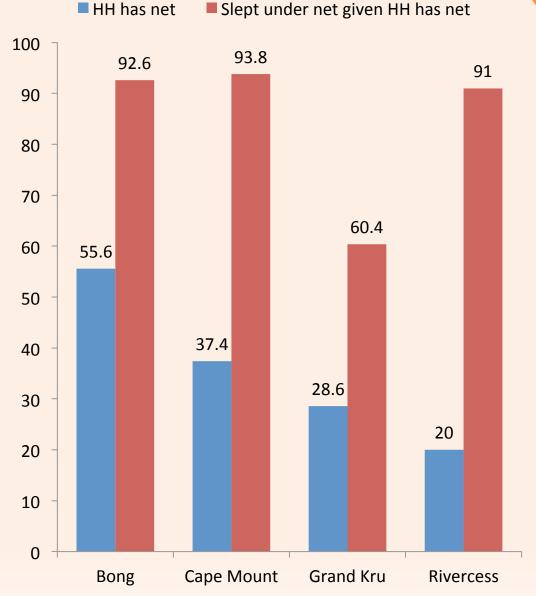






#### **Net ownership and** caretaker use

- When the household has nets, most caretakers sleep under one, except in Grand Kru;
- In households with at least one ITN, significant predictors of increased caretaker bed net use are:
  - Female gender;
  - Secondary education or higher;
  - Married status
  - Residence in Bong or Cape Mount



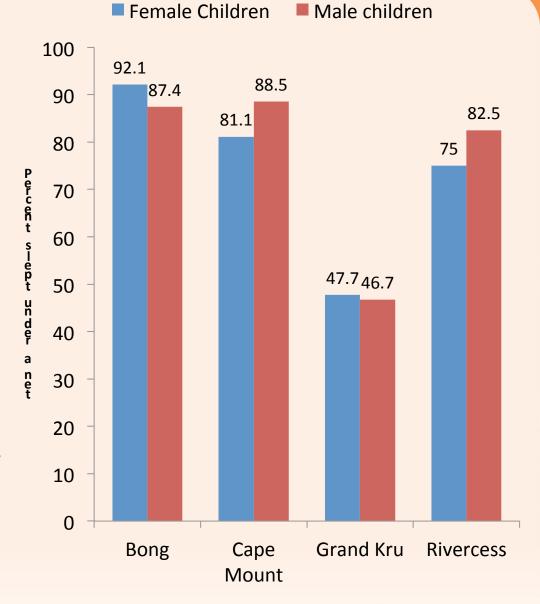
HH has net





# Child net use in households with at least one bed net

- Most children sleep under a net in households with net;
- Residence in Grand Kru and larger household size associated with decreased odds of sleeping under a net;
- Odds of sleeping under a net increase with number of nets in households;
- No differences by sex or household wealth status

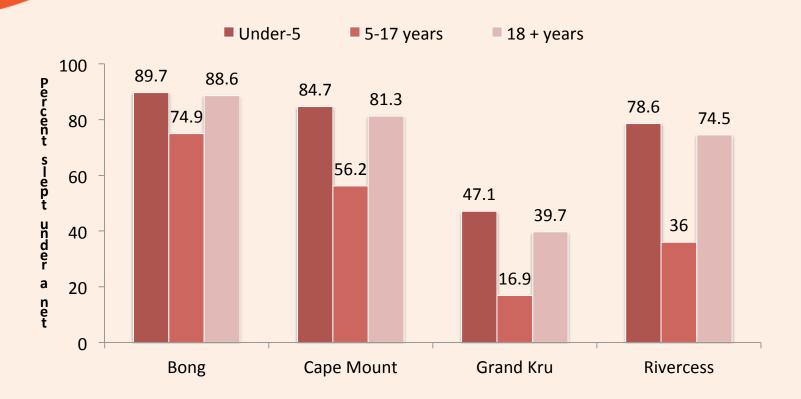


Female: n=300; Male: n=322





## Net use among various age categories in households with at least one bed net

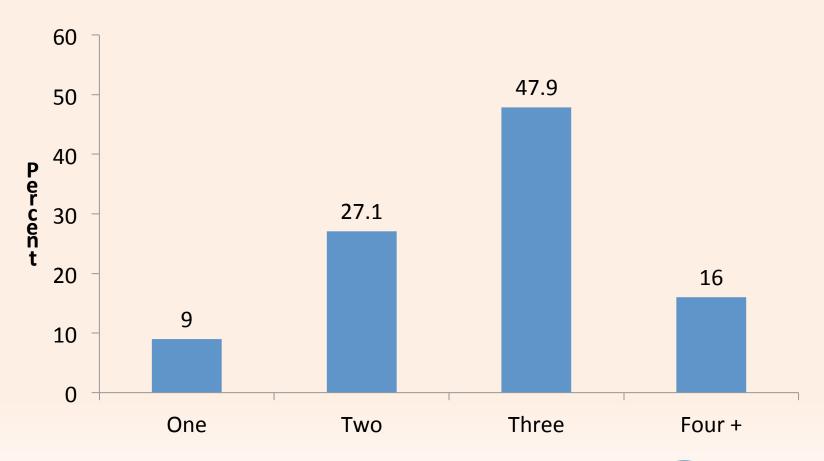


No evidence of preferential treatment for children under-5 over adults in net allocation in any county. However, older children and adolescents less likely to use a net than children or adults.





# Percent distribution of nets by number of users







## IPTp ideation and uptake





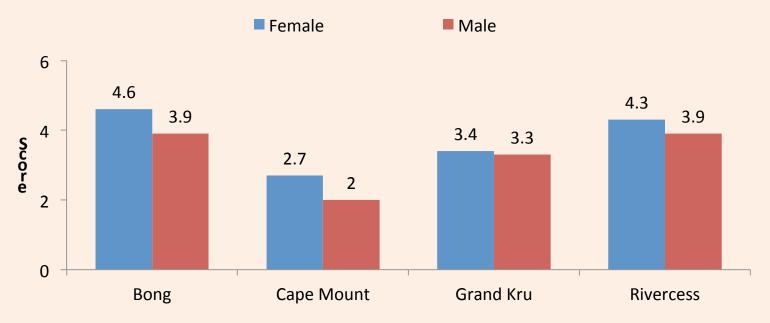
## **Components of IPTp Ideation**

- Knowledge about IPTp
- Attitudes towards
- Perceived response efficacy of IPTp
- Interpersonal communication about malaria in pregnancy
- Descriptive norm about ANC use





## **IPTp Ideation**

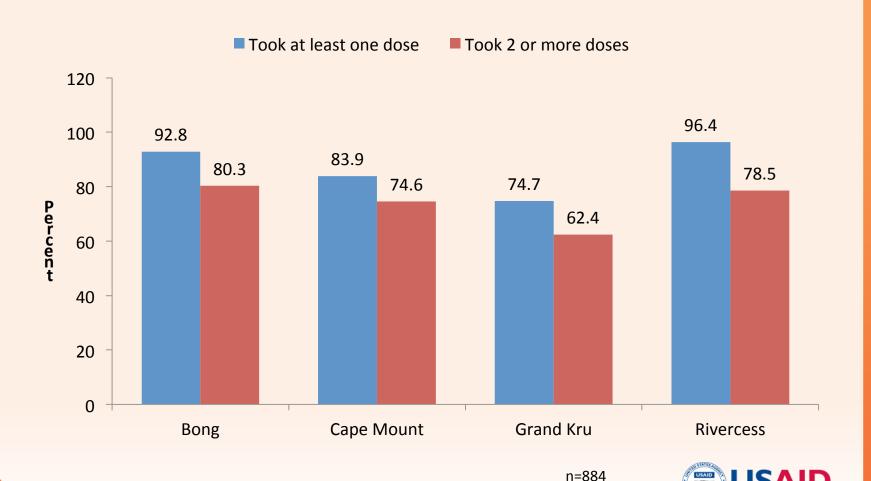


- Overall IPTp ideation moderately favorable: score ranges from -6 to 11 with mean of 3.6;
- Score significantly higher for women than men, particularly in Bong and Cape Mount;
- Higher (more positive) ideation score associated with residence in Bong and Rivercess, campaign exposure, and richer households.





# IPTP uptake during pregnancy in last 2 years





# Case management: ideation and practices





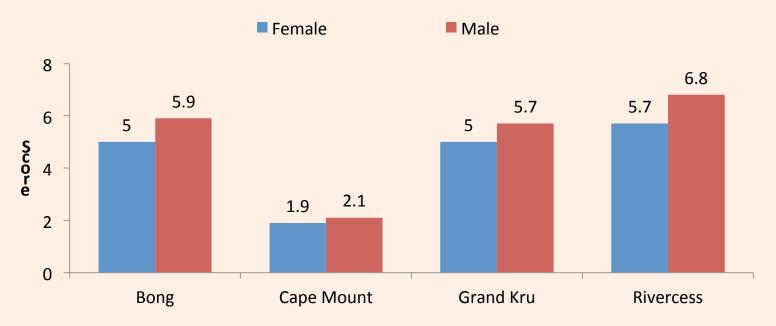
# **Components of treatment ideation**

- Awareness that malaria is treated with ACT
- Perceived self-efficacy for recognizing a fever indicative of malaria
- Treatment attitudes
- Perceived response efficacy of diagnostic test
- Participation in household decision about health care seeking for children
- Perceived norm about malaria treatment
- Discussion about malaria treatment with others





## **Treatment Ideation Score by County and Sex**



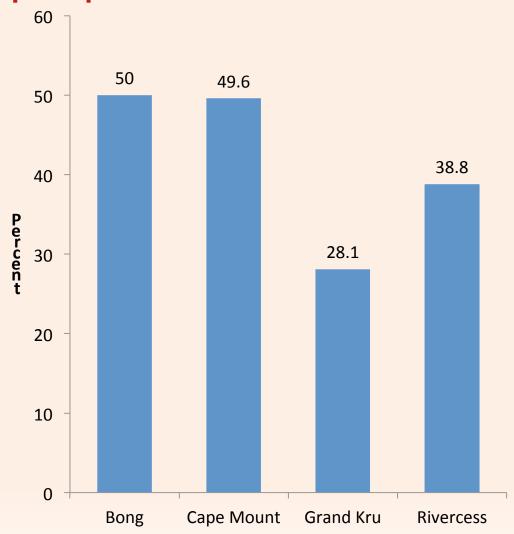
- Overall treatment ideation moderately favorable: score ranges from -5 to 16 with mean of 4.6;
- Score significantly higher for men than for women in most counties;
- Higher (more positive) ideation score associated with residence in Bong and Rivercess, campaign exposure, and richer households;
- Lower (more negative) ideation score associated Christian religious affiliation





## Children with fever in last 2 weeks that received prompt ACT treatment

- Only a little over a third (36.8%) of children sick with fever in last two weeks received prompt ACT treatment;
- Odds of prompt ACT treatment increased with:
  - Caregiver's positive general malaria ideation;
  - Caregiver's positive treatment ideation
  - Campaign exposure level.





# Recommendations - Programmatic

- Radio should continue to be at the core of malaria prevention and treatment communication but programs should explore additional communication channels to increase reach;
- Strategically designed messages should seek to correct misinformation about malaria prevention, symptoms and causes;
- Efforts should seek to increase understanding about perceived threat of malaria while strengthening the self-efficacy for action;





# Recommendations - Programmatic

- Increase understanding about response-efficacy of bed nets and IPTp;
- Many of the nets in use in the study households were in need of repairs. Communication efforts that promote net care and repair are relevant;
- LLIN distribution plans should consider that white rectangular nets were most preferred by caretakers, and capitalize on the willingness of the population to pay for nets;





# Recommendations – Future Research

- Conduct further research to understand why women are not taking the recommended doses of IPTp;
- Conduct further research on multi-level factors that hinder prompt treatment.





# Recommendations – Indicator Guide

- Net access indicator may underestimate net coverage in contexts where more than two people normally share a net;
- Data collection tools should allow us to collect information on more household members per net;
- Some suggested questions could be benefit from rewording: e.g., Q408 and Q714

