# Assessing the Influence of Psychosocial Factors on Provider Malaria Case Management in Health Facilities in Benin

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### **Context & Methods**

### 15 to 20 20 to 25 25 to 30 30 to 35 35 to 40 40 to 45 45 to 50 50 to 55

#### Malaria in Benin

- Risk of malaria spans the entire country
- Malaria is a leading cause of morbidity and mortality
  - 47% of outpatient consultations in the general population
  - ~50% of outpatient consultations
  - 39% of hospitalizations in children under five
- National prevalence of malaria among children aged 6 to 59 months has increased 39% between 2011-2012 and 2017-2018





# Provider Behavior & Malaria Case Management

- Health care provider adherence to case management guidelines is critical for malaria control
- Provider behavior is complex and influenced by <u>factors</u> at the individual, interpersonal, facility, and system levels.
- Psychosocial factors have been found to influence behaviors across health areas and settings
- However, little research attention has been paid to the role of psychosocial factors on provider behavior, including their attitudes and perceived norms





# Study Methods

- Cross-sectional health facility assessment in Benin
- Random sample of facilities within each of the 12 departments selected using probability proportional to the facilities' 2019 malaria incidence
  - 128 health facilities
  - 366 health workers involved in malaria case management
  - 1245 patients with fever
- Providers interviewed with structured questionnaire to assess socio-demographic and psychosocial factors affecting case management practices





# Data Analysis: Multivariable Logistic Regression



Dependent variable: correct management of fever



Independent variables: client sociodemographic characteristics, provider psychosocial characteristics, and facility characteristics



Logistic regression limited to facilities where diagnostic testing (RDT and microscopy) was available on survey date (88 facilities)



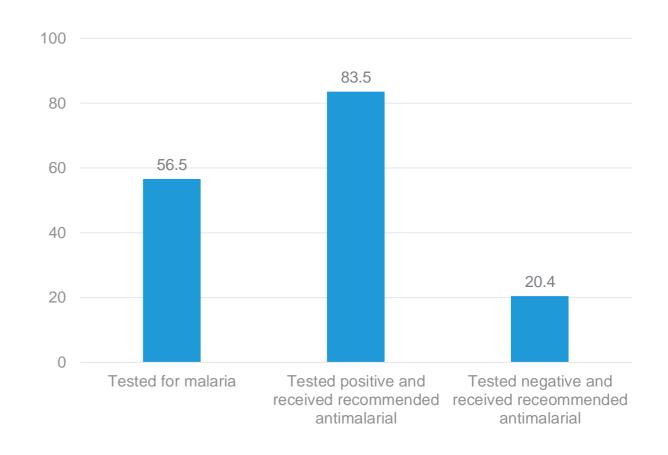




# Results

#### Provider Behavior: Adherence to Guidelines

- Of the suspected malaria cases, less than two-thirds were tested for malaria
- 84% of tested and positive cases were given correct treatment for malaria
- One fifth of cases that tested negative received an antimalarial
- Among untested suspected cases, 57% received an antimalarial



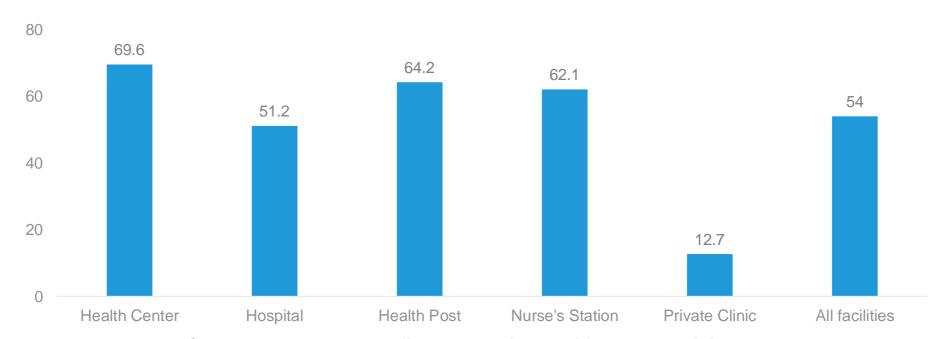






#### Provider Behavior: Adherence to Guidelines

Percent of clients correctly managed\* in facilities with diagnostic test, by type of facility n=793







\*Correct management defined as testing positive and receiving recommended antimalarial or testing negative and not receiving antimalarial.



# Logistic Regression: Correct Case Management

Predictors – Psychosocial & Other Variables	Odds Ratio
Patient's age (RC=<5) 5-14 years 15 years or older	1.66* 1.04
Percent of health workers regularly supervised	0.37*
Percent of health workers trained in case manageme	ent 8.31***
Health workers mean case management knowledge Medium High	score (RC=low) 0.69 2.33**
Perceived positive peer behavior (RC=low)  Medium  High	2.57* 1.37
Provider's positive perceptions about their clients (R Medium High	RC=low) 1.25 1.61±
Prevalence of positive cases in health facility (RC=lov Medium  High	w) 2.53** 3.05** <b>Break</b>





#### Additional Results

- Facility type: Odds of adherence was especially low for patients treated in private clinics
- Attitudes: Provider attitudes towards case management not associated with the outcome





## Recommendations

#### Recommendations

- Psychosocial factors of providers should be taken into account to improve malaria case management in Benin
- Improving provider adherence to case management guidelines could benefit from:
  - Strengthening technical knowledge of providers
  - Using a norms-based approach to address negative beliefs of providers about the professional behaviors of their colleagues
  - Promoting discussion among providers about case management guidelines
  - Empowering providers to strengthen the capacity of patients to adhere to treatment and positioning patient adherence as the norm







#### Recommendations

- Efforts to improve provider adherence to case management guidelines will also benefit from:
  - Paying special attention to private clinics
  - Better understanding and addressing the reasons for the negative association between provider supervision and adherence. Could it be that poorly performing facilities are the ones targeted for supervision?
  - Emphasizing the importance of adherence to guidelines irrespective of patient's age





#### Thank You

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