



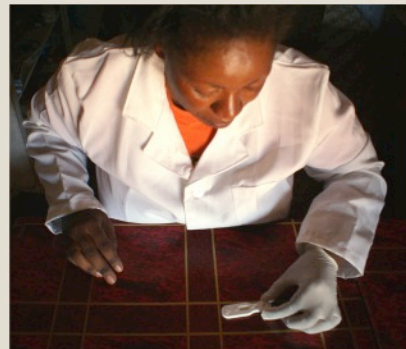
a decade in communicable disease control and child health

Knowledge, attitudes, and practices related to dengue prevention in Cambodia, 2013-2014

John Hustedt
March 25, 2014



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Background

- Dengue is a vector-borne viral infection that affects 50-100 million people per year with 17,533 confirmed cases in Cambodia last year
- An acute, rapid-onset illness with wide spectrum of clinical presentations, including high fever, extreme headaches and exhaustion, muscle and joint pain, and rash
- Currently no drugs or vaccines available leaving the focus on prevention. Effective and sustainable prevention programs will likely need to encompass all vector borne diseases

Integrated vector management

Main objective

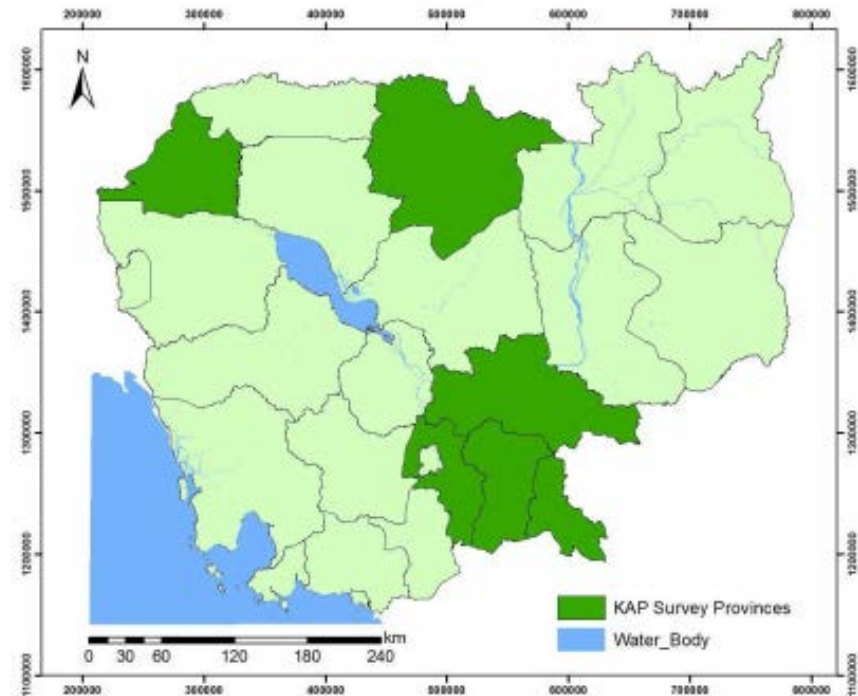
To assess and strengthen the ability of community and health systems to better prevent the spread of vector-borne diseases, as well as to improve recognition of symptoms, identification, and response to vector-borne outbreaks (particularly dengue)

- Knowledge, attitudes and practice (KAP) survey on prevention
- Behavior change communication (BCC) by positive deviance
- Surveillance assessment and outbreak response

KAP study methods

Conducted in six provinces, which were selected based on a risk assessment by the National Center for Parasitology, Entomology and Malaria Control (CNM)

- 30 villages
- 26 households per village
- 780 households





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Results

Table 1: High levels of knowledge by respondent demographics

	Dengue symptom knowledge	<i>P</i>	Prevention of mosquito breeding knowledge	<i>P</i>	Prevention of mosquito bite knowledge	<i>P</i>
Gender						
Male	77.2% (66.9%-85.1%)	*	81.7% (72.7%-88.2%)		80.7% (72.2%-87.1%)	
Female	87.0% (82.4%-90.5%)		85.0% (79.4%-89.4%)		83.7% (78.5%-87.8%)	
Age						
Under 31	84.9% (78.9%-89.5%)		92.2% (87.2%-95.4%)		91.1% (85.5%-94.6%)	
31-49	87.1% (82.6%-90.1%)		83.4% (78.1%-87.7%)	**	81.9% (76.3%-86.5%)	**
50+	82.1% (74.1%-88.1%)		79.9% (69.6%-87.2%)		78.4% (71.0%-84.3%)	
Education						
Lower	84.5% (79.3%-88.6%)		81.0% (73.8%-86.5%)	***	79.4% (73.4%-84.3%)	***
Higher	85.7% (80.6%-89.6%)		92.7% (88.0%-95.6%)		92.0% (86.8%-95.2%)	
Wealth						
Lowest	92.8% (86.8%-96.2%)		92.5% (85.5%-96.3%)		90.7% (84.4%-94.6%)	
2nd lowest	80.9% (73.5%-86.7%)		82.2% (71.9%-89.3%)		80.9% (71.5%-87.6%)	
Middle	84.6% (76.7%-90.2%)	***	80.5% (72.0%-86.8%)	*	85.2% (79.2%-89.7%)	*
2nd highest	90.0% (84.4%-93.7%)		86.8% (78.3%-92.3%)		78.7% (71.1%-84.7%)	
Highest	72.9% (60.5%-82.4%)		77.3% (65.0%-86.1%)		75.9% (65.2%-84.0%)	

Statistically significant difference ($P < 0.05$) *, ($P < 0.01$) **, ($P < 0.001$) ***

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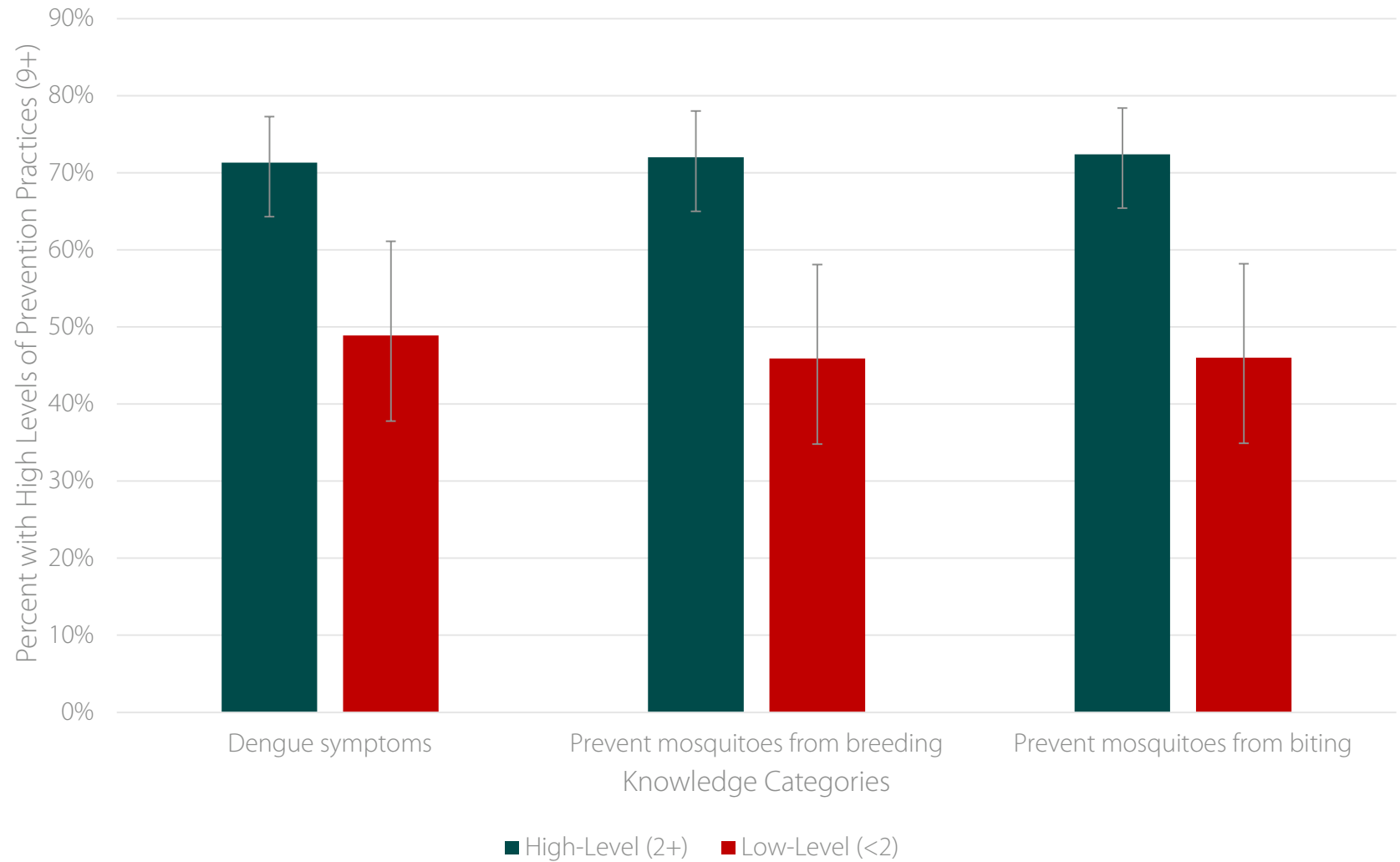
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High Levels of Prevention Practices by Dengue Knowledge



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Table 2: Logistic regression on number of prevention practices

	OR	SE B
Prevent mosquito bites	1.93	0.614*
Prevent mosquitoes from breeding	1.78	0.614*
Dengue symptoms	1.89	0.542*
Male	0.87	0.239
Education	1.15	0.107
Age	0.016	0.009
Wealth	1.11	0.072
Svay Rieng	0.30	0.160*
Kampong Cham	0.44	0.110***
Kandal	0.80	0.184
Preah Vihear	0.55	0.094***
Prey Veng	0.33	0.060***
Cons	0.38	0.249

$R^2 = 0.13$, Statistically significant difference ($P < 0.05^*$, $P < 0.01^{**}$, $P < 0.001^{***}$)

Behaviour Change Communication

Positive deviance pilot in Banteay Mean Chey

- Baseline/endline surveys
- Focus group discussions and in-depth interviews
- Volunteer training
- Monthly meetings
- Seminar





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Conclusions

- Correlation between high levels of knowledge and number of prevention practices used within a Cambodian household
- Reinforces need for continued dissemination of dengue prevention messaging
- Need to develop practical and compelling vector borne disease BCC material
- Innovative ways of providing those materials more frequently and more effectively should be explored

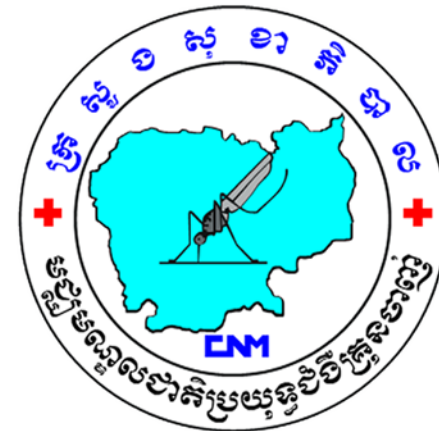
Way forward

Continue supporting programs to improve neglected tropical disease projects by conducting:

- Monitoring and evaluation activities
- Surveillance assessment and outbreak response
- Behavior Change Communication

Acknowledgements

Supported by:





a decade in communicable disease control and child health

www.malariaconsortium.org

Thank you



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