

Voices From The Front Line: Reported Malaria Awareness And Practices Among Employees At Worksites In High Burden Malaria Districts In Vietnam

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BACKGROUND

Malaria transmission in Vietnam is highest in rural, forest areas in the central/southern regions along the Cambodia and Lao borders. 4,548 confirmed cases were reported by the National Malaria Program in 2017, a 9% increase over 2016.

PSI Vietnam is implementing Test, Treat and Track as part of the Greater Mekong Subregion Elimination of Malaria through Surveillance (GEMS) project in Gia Lai, Binh Phuoc, Dak Lak and Quang Binh provinces. Worksites near or in forests are presumed transmission hot spots, but data regarding the location and type of worksites and malaria knowledge and practices of employees has been lacking. Filling this evidence gap will help to better understand the health needs among workers most at risk for malaria and target interventions more likely to succeed. In February 2017 PSI collaborated with government partners to select and interview 155 workers at 5 worksites in Binh Phuoc, Gia Lai & Dak Lak provinces.

METHOD

Between June 2016 and June 2017, a comprehensive worksite listing, mapping exercise and site assessment was conducted in the target provinces. Based on the criteria: number of workers, distance from the forest, malaria cases last year and cooperation of worksite's owners, PSI visited 20 of 158 mapped worksites and prioritized 5 worksites for the study.



At each purposefully selected worksite, a list of temporary and permanent workers was prepared with support from the worksite manager. Eligible workers were at least 18 years old, currently working at the site, spent one day working in the forest as part of their work and gave informed written consent. In total across the five sites, 1,503 workers were eligible for interview. At each site 31 workers were selected by simple random sampling, giving a total of 155 workers.

Data collection used SurveyToGo software and took 14 days. The study questionnaire captured data on socio-economic profile, a typical working day, the frequency and location of worker's movements, the perception and practice of malaria risk, prevention and treatment, other health concerns and accessible communication channels. Descriptive analysis was performed in Stata version 12.

CONCLUSION

In these high risk worksites, knowledge of and use of treated mosquito bed nets and hammock nets is low, as is awareness of RDTs. These knowledge and practice gaps hinder both prevention and testing for malaria. Future SBCC interventions might find success by tapping into workers' concerns about falling ill with fever and linking this to malaria. Opportunities also exist to reach workers in more active, targeted and innovative ways including targeting provider counselling and the supply of treated nets and RDTs at the most frequently used service delivery points; and engaging more actively with the community and community leaders to elevate the perceived risk of malaria and start a dialogue about effective prevention approaches. Including non-facility based providers in these activities might extend service delivery beyond current stationary delivery points. Together, these actions may help achieve the government's goal to eliminate malaria by 2030.

RESULTS

155 workers were successfully interviewed: 83% were male, 80% were married, 39% lived with their families, 74% were aged 18-34 and 23% of all workers were working without a contract.

WORKERS' CHARACTERISTICS

Workers' Characteristics	Frequency	% (denominator = 155)
Male Worker	128	82.6%
Married Worker	124	80%
Workers With Any Family Members At The Worksite	61	39%
Age 18-34 Year Old	114	74%
Worker Having No Contract	36	23%
Worker Having No Religion	112	72%
Having Health Insurance	130	84%
Secure Housing (brick/concrete construction with a finished roof and secured doors)	81	52%

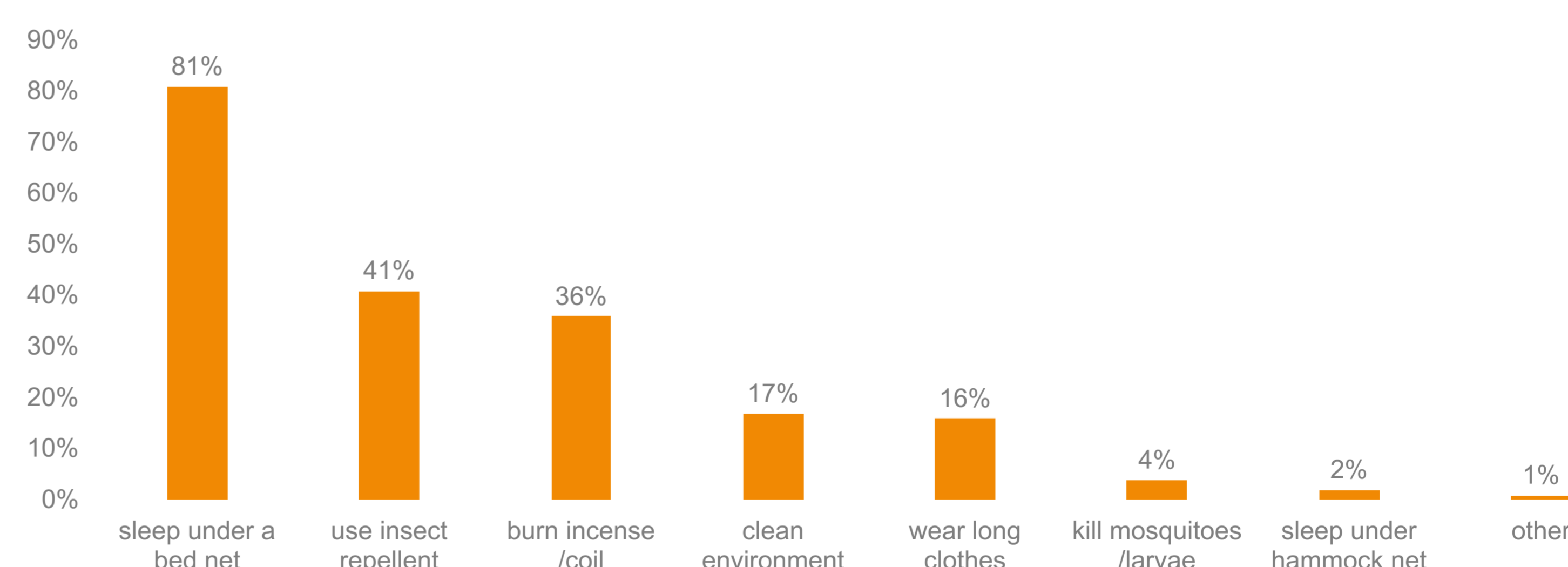
The health concerns most commonly cited by workers were fever (84%), malaria (43%), digestive (21%) and respiratory illnesses (21%) and headaches (18%).

RESPONDENTS' PERCEPTIONS OF THE TOP 3 ILLNESSES THAT AFFECT WORKERS (N=409)

Type of Diseases	Fever	Malaria	Digestive System	Respiratory Disease	Headache	Dengue Fever	Musculoskeletal Problems
%	84%	43%	21%	21%	18%	13%	11%

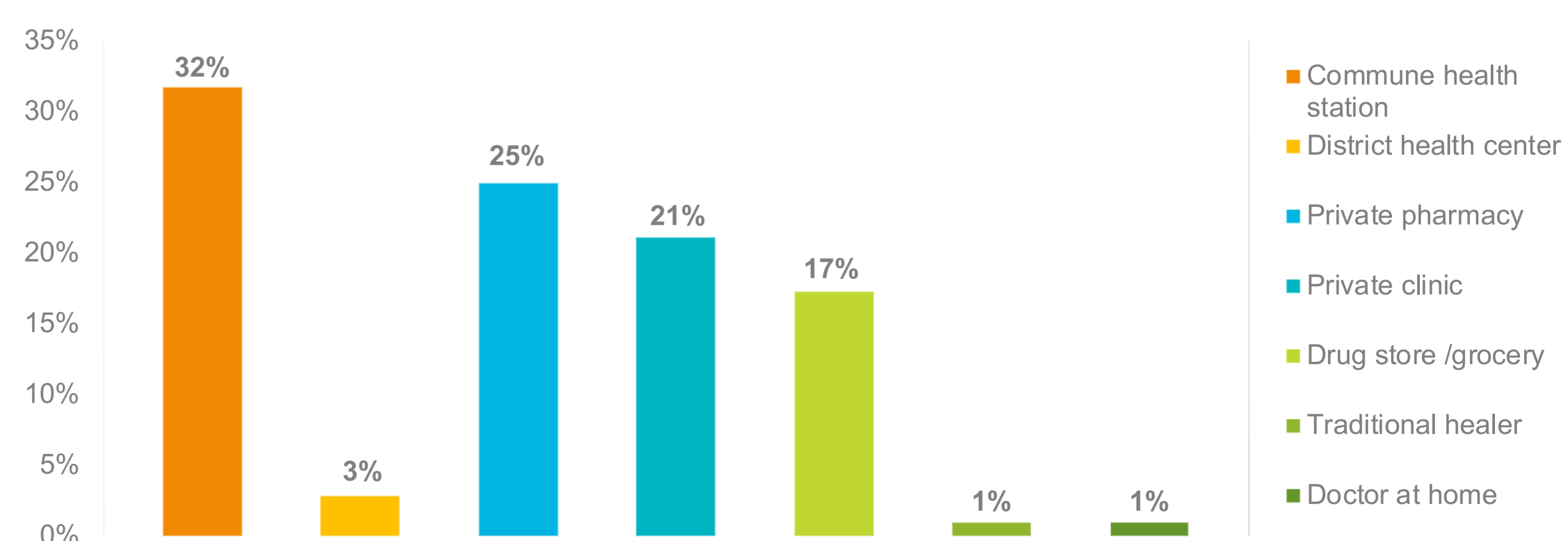
The most commonly cited malaria prevention method was bed net use (81%). 98% of workers reported **any** bed net use the night before the interview, however only 24% of respondents had used a **treated** net the previous night. Hammock nets were rarely mentioned as a prevention option.

WORKERS' KNOWLEDGE OF MALARIA PREVENTION METHODS



The private sector - including private pharmacy, private clinic, drug store, traditional healer and doctor at home - was more commonly cited as the source of advice or treatment for workers' last fever (65%) compared to the public sector (35%).

DISTRIBUTION OF THE SOURCE OF ADVICE AND/OR TREATMENT VISITED BY RESPONDENTS FOR THEIR LAST FEVER EPISODE



Only 32% of workers reported awareness of malaria rapid diagnostic tests (RDT) and 22% of them knew where to find RDTs. 60% of workers who had fever reported receiving a malaria test.

