Symposium on Malaria prevention and control in mobile and hard to reach populations *Paramaribo, April 6-8, 2022*

Targeting School-aged Children as Drivers of Malaria Vector Control Interventions in Malaria Endemic Rural Communities of Nigeria: An Innovative Community-led Approach towards Malaria Elimination

Otun I.O, Idowu O.A and Aladesida A.A
Federal University of Agriculture, Abeokuta

BACKGROUND

School-aged children bears significant but less appreciated burden of malaria.

These populations have recently been recognized as drivers of residual malaria transmission since they usually go asymptomatic and don't get treated.

School-aged children are not being prioritized nor utilized as active participants in community led interventions.

Thus, if properly trained and enlightened about malaria and effective vector control interventions, school-aged children can lead and actively cascade acquired knowledge through the communities.

METHODS

Study Area: The study was in two selected rural communities to form the intervention and control communities. A total of 307 participants completed the study (24 children were enrolled)

Ethical Clearance: The Ethical approval and consent for the study was obtained from the state MoH and community/parents respectively.

Study Design: A Mosquito population and malaria parasite index was measured in three phases:

- Pre-Intervention—Baseline data
- Intervention--- Training
- Post- Intervention—Evaluation of Intervention

Statistical Analysis: Chi square was used setting P<0.05 as statistically significant

FINDINGS

The source reduction activities of the trained children were observed to significantly reduce (P<0.05) indoor resting mosquitoes by 67.2% in the intervention community while a significant increase (45.5%) was recorded for the control community.

Indoor resting density of malaria vector reduced from 3.8 to 1.3 in the intervention community.

At baseline, school-aged children (6-12 years) recorded the highest prevalence of malaria parasite both at the intervention (84.2%) and control community (73.2%). Overall malaria parasite prevalence reduced significantly in the intervention community from 40.8% to 23.0% (P<0.05) was recorded for the control community

Table 1: adult mosquito population (pre and post)

Mosquito (Sub families)	INTERVENTION COMMUNITY		
	Pre (%)	**Post (%)**	**% Change**
Anopheline	137 (36.7)	45 (23.7)	↓67.2%
Culicine	236 (63.3)	145 (66.3)	↓38.6%
Total	**373 (100)**	**190 (100)**	**↓49.1%**

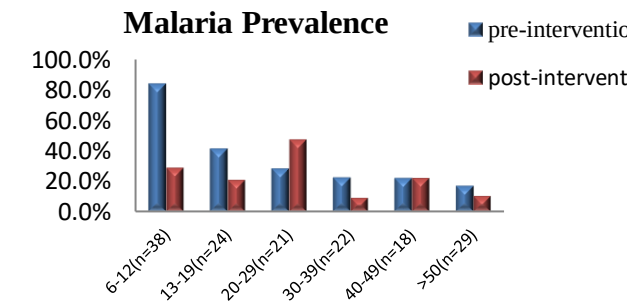

Figure 1: Prevalence of malaria parasite (pre and post

CONCLUSION

The study revealed that school-aged children are enthusiastic populations that will incorporate their new knowledge into action.

The strategy of actively engaging children in vector control intervention had a positive impact on the community (children and adults).

This approach can be used to complement existing malaria control strategies.

REFERENCE

World Health Organisation (2013).Larval source management: A supplementary measure for malaria vector control: An operational manual.

CORRESPONDENCE

For questions, send email to Idris Otun, at otunidris@gmail.com