Closing the Gap Between Insecticide Treated Net Ownership and Use for the Prevention of Malaria

Diana G. Rickard, MD1,2, Rebecca N. Dudovitz, MD1, Mitchell D. Wong, MD, PhD1, Howard C. Jen, MD, MSBS3, Rebecca D. Osborn, MPH, MSW2, Hilda E. Fernandez, MD4, and Clement I. Donkor2

(1) Department of Health Services, University of California Los Angeles; (2) Ghana Health and Education Initiative; (3) Department of Surgery, University of California Los Angeles; and (4) Department of Pediatrics, University of California Los Angeles

What Is the Purpose of this Study?
• To improve insecticide-treated net use for the prevention of malaria by involving the community in the creation and implementation of an intervention.

What Is the Problem?
• Malaria is the leading cause of illness and death in children younger than 5 years and pregnant women in sub-Saharan Africa.
• If used, ITNs reduce malaria cases by more than half and all-cause mortality in young children by 15% to 30%.
• Despite their tremendous potential, use of these nets is poor across sub-Saharan Africa.

What Are the Findings?
• Based on community input, we changed the way that ITNs are distributed, as well as the support system for their use.
  Instead of community members receiving ITNs in a bag with little education, they were assisted in hanging the nets, given a 15-minute flipchart-based education, and followed up monthly by fellow community members.
• ITN use increased from 29% in net-owning households before the new approach to 97% 1 year after using the new approach.

Who Should Care Most?
• Individuals working on malaria prevention.
• Individuals involved in community-based programs that involve behavior change.

Recommendations for Action
• Involve community members in the design of behavior change programs regarding ITN use.
• To overcome the initial effort in hanging ITNs, enlist community members to assist with hanging nets and providing education.
• Provide an ongoing support mechanism for community members.