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Malaria Therapy, Killing Mosquitoes on their Way to get Infected Blood Meals

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Excluding family members and caretakers, mosquito-borne diseases affect approximately 700 million people annually, which is about one-eleventh of the global population. Among these diseases, malaria is the most severe, causing 250 million illnesses and 600,000 deaths each year. Although malaria is widespread in tropical and subtropical regions, 94% of cases are concentrated in a small number of dry, semi-desert sub-Saharan countries, where some nations have infection rates affecting up to 30% of their populations. These high-density regions provide nearly ideal case studies for understanding the mechanisms of malaria transmission. Research indicates that malaria burdens tend to be lower in urban areas with community water supply systems and higher in rural areas, where people store water in their homes, creating mosquito breeding habitats. Because of inadequate rainfall to sustain surface vegetational and the absence of natural rainwater pockets for mosquito proliferation, “domestic” mosquito populations become the primary disease vectors, transmitting malaria within households. The aim of this study is to address this issue by implementing proven outdoor female mosquito control measures indoors. As a result, no live blood-seeking mosquitoes were detected; they were eliminated before they could bite, preventing malaria transmission within affected households. With no newly infected mosquitoes, the transmission cycle was effectively interrupted, halting the further spread of the disease.

Keywords: Mosquito, Malaria, Dengue, West Nile Virus, Zika, Yellow Fever, Chikungunya