in 19 districts in Lindi, Mtwara, and Ruwuma, a total of 421,285 ITNs, to classes 1,3,5,7 in primary school and Form 2 and 4 in secondary schools. By August 2016 Tanzania will have implemented four annual rounds of school-based distribution in three Southern regions. SNP2 was implemented in 2014 by NMCP and Research Triangle Institute, delivering 489,099 ITNs to school children, and adding classes 2 and 4 in Lindi. In the third round in 2015, NMCP with JHUCCP’s VectorWorks project delivered 494,407 ITNs to 1,919 schools in the 19 districts, targeting classes 1-3, 5, and 7 in primary school in Ruwuma and Mtwara, and classes 1-5 and 7 in Lindi. The 4th round in August 2016 will continue in the same regions in the south and expand to four regions in the Lake Zone; 1,310,000 ITNs will be delivered to 5,054 schools in a total of seven regions. Working with a multi-sectoral task force including Ministry of Health, Ministry of Education, and local officials, enrolment data was gathered from each school, verified, and used to quantify deliveries for each school. After training and delivery of ITNs to schools, teachers distributed ITNs to the eligible students in the targeted classes, and provided behavior change messages on net use, care, and malaria prevention. We will discuss the design, implementation and outcomes of SNP3 and SNP4, including the messages on net use, care, and malaria prevention. We will discuss the eligible students in the targeted classes, and provided behavior change messages on net use, care, and malaria prevention. We will discuss the design, implementation and outcomes of SNP3 and SNP4, including the process of quantifying the ITN needs, training and sensitization activities, data management, and logistics considerations for an ongoing, mass yearly distribution of nets to schoolchildren. We will also discuss changes from SNP1 to SNP4 in the operations management, in particular, decisions to adjust the number of classes targeted each year based on evaluation data, and implications for future national scale-up.

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PLANT-MEDIATED EFFECTS ON MOSQUITO CAPACITY TO TRANSMIT HUMAN MALARIA

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The ecological context in which mosquitoes and malaria parasites interacts has received little attention, compared to the genetic and molecular aspects of malaria transmission. Plant nectar and fruits are important for the nutritional ecology of malaria vectors, but how the natural diversity of plant-derived sugar sources affects mosquito competence for malaria parasites is unclear. To test this, we infected Anopheles coluzzii, an important African malaria vector, with sympatric field isolates of Plasmodium falciparum, using direct membrane feeding assays. Through a series of experiments, we then examined the effects of nectar from Thevetia nenfolia and Lannea micracarpa, and fruit from Barleria lupulina and Mangifera indica on parasite and mosquito traits that are key for determining the intensity of malaria transmission. We found that the source of plant sugar differentially affected infection prevalence and intensity, the development duration of the parasites, as well as the survival and fecundity of the vector. These effects are likely the result of complex interactions between toxic secondary metabolites and nutritional quality of the plant sugar source, as well as of host resource availability and parasite growth. Using an epidemiological model, we show that plant sugar source can be a significant driver of malaria transmission dynamics, with some plant species exhibiting either transmission-reducing or -enhancing activities.

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ASSESSMENT OF MALARIA TRANSMISSION FROM HUMAN TO MOSQUITOES IN SEASONAL MALARIA CHOMPREVENTION IN THE WESTERN REGION OF BURKINA FASO

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Seasonal malaria chemoprevention (SMC) can reduce malaria cases up to 80% in sahelian region. However the impact of SMC on human to mosquito malaria transmission is currently unknown. Here, we evaluated the infectiousness to mosquitoes of volunteers receiving SMC by membrane feeding assays. Children over the age of 2 years, participants of a SMC clinical trial were randomly selected. They were invited to participate after
COMMUNITY ENGAGEMENT AROUND THE IMPLEMENTATION OF TRIAL OF INSECTICIDE-TREATED WALL LINING FOR MALARIA CONTROL IN RURAL TANZANIA

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Community engagement (CE) during community trials is a complex social phenomenon that defies simple explanation or mechanization. We present findings from an assessment of the sensitzation process, experiences, and challenges in improving understanding and subsequent acceptance of an insecticide-treated wall lining (ITWL) program. The initial project sensitization plan relied on the traditional approach of inviting villagers to meetings with researchers. However, meeting schedules coincided with farming activities and Tanzania's presidential elections, resulting on poor attendance. Sensitization was re-strategized to add door-to-door sensitization using local advocates, announcements using a megaphone, and designing and distributing brochures detailing the study objectives and consenting process. The process continued during the ITWL installation phase. Following re-strategizing of sensitization, the ITWL acceptance rose to 86.4%. However, some clusters still had some refusals. Reasons included gender and consent, for example, in some houses the head of house (generally a man) refused installation after the wife had accepted. Old rumors resurfaced that ITWL contributed to male impotence. Some installers, initially unprotected, developed skin rashes. In one case, one resident's skin rashes spread fear to a whole hamlet. Households with better socio-economic status cited personal ability to control malaria and feared damage to their walls by the installation process. Directives that children should not touch the wall liners and confusion from installation delays all led to refusals. Rumors of side effects from the ITWL contributed much on project challenges including refusals. Re-strategizing sensitization plus continuous sensitization throughout and after the official installation period increased ITWL acceptance. Future projects should incorporate continuous sensitization and consider using specialized village research committees for improved CE.

DIHYDROARTESMISININ-PIPERAQUINE AS INTERMITTENT PREVENTIVE TREATMENT FOR MALARIA IN A REFUGEE CAMP, ADJUMANI, UGANDA

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An intermittent preventive treatment (IPT) program using dihydroartesminin-piperazine (DP) was implemented between March and July 2015 in a refugee camp in Adjumani District, Uganda. To our knowledge, this is the first implementation of IPT in the setting of a humanitarian emergency. Weight-dosed DP was offered to all children aged 6 months-14 years in the camp in March, May, and July 2015, at eight-week intervals. On average, 13,537 children received each distribution. To evaluate malaria incidence, reported cases were compared to the same 6-month period from 2014 taking into account population changes. To evaluate malaria prevalence, in the week prior to each

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