

Assessment of Behavior Change Communication (BCC) interventions in support of malaria control activities conducted in Benin by PMI's ARM3 project

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In Benin, from 2012 to 2014, PMI ARM3 project conducted Behavior Change Communication (BCC) activities in 28 of 34 health zones (HZs). In 2015, we assessed the project's BCC contributions to improving malaria preventive and treatment-seeking attitudes and behaviors among pregnant women and children <5. We selected two HZs in Oueme-Plateau region as the intervention group and two HZs in Mono-Couffo region as the control group. Both groups shared similar socio-economic characteristics. We sampled 16 health centers, 528 women (321 pregnant and 207 mothers of children <5) and assessed in both areas using the Roll Back Malaria 2014, Malaria BCC Indicator Reference Guide. Associations among variables were tested at the 5% threshold using the ANOVA *F*-test. Dissemination of malaria messages was mainly conducted through social mobilization (34% of women recalled participating in the intervention group vs. 9% in the control group), community radio spots (32% of participants in the intervention group reached/recalled having heard a message versus 14% control group, $p < 0.001$) and flyers distribution through household visits (76% intervention group recognize an image from a flyer vs. 54% control group). 93% of the women in the intervention group knew what to do (use mosquito nets, preventive medication taken during pregnancy) to prevent malaria compared with 84% in the control group ($p < 0.05$). 90% of children <5 in the intervention group had slept under an LLIN the night before the assessment compared to 82% in the control group ($p < 0.01$). The level of LLIN use by pregnant women in the intervention group was higher compared to the control group (87% against 76%, $p < 0.05$). 66% of women in the intervention group who had a live birth during the past two years received two or more doses of sulfadoxin/pyramethamin during antenatal care visits versus 42% in the control group ($p < 0.01$). 48% of women in the intervention group stated that ACT is the most effective drug against malaria compared to 28% in the control group ($p < 0.01$). BCC activities had a positive effect in improving behaviors related to the prevention of malaria in pregnant women and children <5.