Assessing IRS performance and barriers in a gender-integrated vector control program on Bioko Island, Equatorial Guinea

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Due to social, economic and physiological barriers, women have historically been underrepresented in spray programs across Sub-Saharan Africa. The Bioko Island Malaria Control Project (BIMCP) has implemented IRS as one of the primary vector control strategies for malaria control on Bioko Island since 2004. This study aims to assess the performance and barriers for engaging women to become IRS operators and assume supervisory positions using data from 2012 to 2018, where approximately 35% of all spray operators have been female. In part, this gender balance has been achieved through guidelines such as equal pay for men and women, ensuring physical work environment provides safe and private areas for women, pregnancy testing for female operators before every round for safety reasons, and continued financial support for women during maternity leave. The BIMCP collects routine IRS data for every sprayer, assesses the quality of spraying techniques and guidelines through direct observation, and quantifies the insecticide sprayed on walls with high-performance liquid chromatography (HPLC) for assessing sprayer quality control. This study will evaluate the gender policies in place to assess the engagement of women in vector control. It will evaluate not only the productivity of male and female counterparts, comparing attendance and the average number of households and rooms sprayed daily; it will also evaluate the quality of insecticide coverage achieved by male and female operators using results from the HPLC studies and the number of performance infractions recorded by supervisors. As it enters Phase IV of implementation, the BIMCP hopes to continue to engage female spray operators and encourage them to seek higher positions as supervisors and team managers.