

Factors associated with refusal and reluctance to Indoor Residual Spraying on Bioko Island, Equatorial Guinea

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Indoor Residual Spraying (IRS) has proven to be a robust control measure against malaria, and until 2015 it was the primary vector control strategy under the Bioko Island Malaria Control Project (BIMCP). However, its effectiveness strongly depends on public acceptance by the targeted populations. This study aims to describe IRS acceptance and to investigate factors related to refusal and reluctance amongst the populations of Bioko Island. A secondary data analysis of the 2017 annual Malaria Indicator (MIS) survey; which collected valid data on 4,835 random households, selected from every community on the Island was conducted. The multinomial logistic regression was used to assess factors associated with IRS refusal and reluctance. 39% percent of households were reported to have been sprayed (not all communities are targeted for spraying). When respondents were asked if they will like their houses to be sprayed during the next IRS round, 81.1% accepted, while 11.1% refused and 7.8% were reluctant (don't know). The reasons mostly evoked for refusals were "IRS causes ill effects" (50%) and "IRS is disruptive or annoying" (25%). Respondents belonging to the middle and high wealth categories were more likely to refuse or to be reluctant to IRS; those living in households with heads having post-secondary educations were more likely to refuse IRS, and those who were not sure if their households were sprayed in the past were more likely to be reluctant to IRS. However, respondents living in the districts of Baney, Luba, and Riaba were less likely to refuse or to be reluctant to IRS when compared to Malabo. Individuals living in households that have been sprayed in the past were less likely to refuse or to be reluctant to IRS, and those previously exposed to malaria sensitization messages were less likely to be reluctant to IRS. Refusal and reluctance to IRS is almost 20% in households on Bioko Island, and are associated with socioeconomic, geographic, and educational factors. There is a need to improve malaria sensitization strategies, targeting every social class to increase IRS uptake.

Character count with no space: 1,712