One Year of Community Led Larviciding : Bioko Island

Background

Larviciding has historically recorded success in vector control, known to be effective in urban setting where breeding sites are generally and easily assessable. This study is aimed accessing acceptability and implementation of a community led larviciding in a rural setting.

Methods

Community Agents (ACPs) were identified and recruited in 13 communities with the help of the community leaders; trained and provided materials.

At baseline, the entomology team and the ACP identified and characterized existing habitats; type of habitat, existence of larvae and the stages of larvae.

Weekly, the ACPs were expected to visit and treat all habitats that the owners consented and identify and treat new ones. The leader of the ACPs kept a register of attendance.

The entomology team visits the community on the same day of the week but at a later time to monitor the activities of the ACP and recorded; if each habitat has been treated, habitats are categorized as being old or new, the stages of larvae and updated the ACP's attendances register. Periodically, the ACPs were given a feedback on their activities at a community meeting.

Result:

At baseline there were 1100 habitats in the 13 communities, about 64.0% of the habitats were in only 2 communities, there were 92 ACPs.

About 83.2% of the habitats were household water containers, 4.6% car tracks, and the drainage system being 4.5%. In all 2.9% of the habitats were anopheles positive and 38.5% were positive for another culicine mosquitoes.

Weekly an average of 1376 habitats were to be treated, 25(1.9%) were new, 82(6.0%) were not treated because the owners rejected treatment.

The weekly average of habitats treated by ACPs was 76.0 %(std 7.8%), the average attendances to treatment activities is 82.0%(std 9.2%)

Conclusion:

Larviciding requires 100% treatment of all known habitats to be successful. The degree of refusal to accept larviciding and the non-attainment of the 100% coverage by the ACPs suggest community led larviciding needs a closer look at regards community entry and how the ACPs were chosen.