deficiency. Malaria infection was determined by microscopy and polymerase chain reaction (PCR).

Results MDA coverage was 90% for round 1 and 89% for round 2, with no major drug side effects or haemolytic emergencies. The mean haemoglobin decrease after MDA was not significant. Prevalence by microscopy decreased from 3.1% on day 0 to 0% on day 8. Prevalence was 1.1% on day 35, and 0.21% on day 120. Importation of malaria was noted to pose a challenge in maintaining malaria freedom.

Conclusions MDA led to a rapid reduction in malaria prevalence in a hypo-endemic setting in Western Kenya demonstrating feasibility when combined with strong community engagement. Primaquine was well tolerated with no haemolytic emergencies. Nonetheless, strategies to mitigate imported malaria need to be developed for long-term sustainability.

OA-027 MASS DRUG ADMINISTRATION (MDA) INTEGRATED MALARIA ELIMINATION IN A HYPO-ENDEMIC ISLAND IN LAKE VICTORIA, KENYA

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Background Mass drug administration (MDA) for malaria elimination has been proposed as a feasible weapon especially for low endemicity settings. Nonetheless, the concept has not been tried for hypo-endemic areas of inland Africa. We conducted MDA using artemisinin-piperaquine and low dose primaquine with insecticide-treated bed nets (ITN) in Ngodhe Island, Lake Victoria, Kenya, aiming to reduce prevalence to below 1% in 6 months post MDA.

Methods We conducted 2 rounds of MDA on days 0, 1, 35 and 36. We employed strong community linkages to ensure robust engagement with the community using workshops, feedback sessions and involvement of community health volunteers previously set up by the Ministry of Health and community fieldworkers. The MDA was administered (directly observed) and participants followed up for possible side effects. Participants were not tested for glucose-6-phosphate dehydrogenase