Epidemiology

OC - (8453) - SCALING-UP MASS TESTING AND TREATMENT EFFECTIVELY REDUCED MALARIA ASYMPTOMATIC PARASITAEMIA IN CHILDREN <15 IN GHANA.

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**Background:** Global efforts to scaled-up malaria control interventions that work are gaining steam. These include the use of Long Lasting Insecticide Nets, Intermittent Preventive Treatment and test, treat and track (TTT) using ACTs. Mass testing, treatment and tracking (MTTT) of the entire populations complemented by home-based management (HBM) using volunteers could be very effective approach at lower cost. MTTT of children in Ghana has demonstrated a parasite load reduction of 90%. However, unanswered questions include - could this be scaled-up? What proportion of the community could be covered? What do we need? Can MTTT reduce asymptomatic parasitaemia levels in under 15 children?

**Methods:** The target population for this study was 5000 asymptomatic individuals in seven communities in the Pakro sub district in Ghana. A community register was developed following a census. Community volunteers conducted quarterly house-to-house testing using RDTs and treating positive cases with ACTs. Between interventions HBM was conducted.

**Results:** Of those tested, asymptomatic malaria parasitaemia reduced from 1,795(36.3%) July, 2017 to 942(23.1%) in March 2018. In eight months parasitaemia declined by 43.5% and 37.3% in children under 15 and under 5, respectively. Coverage was 98.8% in July 2017 and 81.4% in March 2018. One the challenges that surfaced was the fact that decrease in hospital attendance had a negative effect on money generated by the health facility. The district and sub district services though appreciating our work indicated that the negative effect on the health system may be serious and that measures need to be taken to address alternative financing for the health system.

**Conclusion:** This study has demonstrated that combining MTTT/home-based management of malaria could reduce prevalence in under 15 children and that using community volunteers could ensure effective coverage at lower cost. There is need to start looking at financing of the health system without malaria.