

Final Abstract Number: 41.017
 Session: *Epidemiology and Public Health I*
 Date: Thursday, April 3, 2014
 Time: 12:45-14:15
 Room: Ballroom

Failure of malaria control in Nchelenge District, Zambia



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Background: The burden of malaria has decreased dramatically in many parts of Southern Africa including Zambia. However, in Zambia the decline in the burden of malaria has not been uniform despite scaling up of various interventions. In order to better understand the underlying epidemiology factors, vector biology and parasite genomics to guide control strategies the Southern Africa International Centers of Excellence for Malaria Research (ICEMR) has conducted a series of studies including the prevalence of malaria in Nchelenge district. We report on the prevalence of malaria in Nchelenge District between April 2012 and May 2013.

Methods & Materials: Data on the prevalence of malaria was collected through passive surveillance of parasitaemia using SMS text messages from rural health centres and active case detection through cross-sectional and longitudinal community surveys.

Results: Eleven health care facilities reported 49,831 cases of confirmed malaria between April 2012 and May 2013. The prevalence of malaria by RDT was 40% among 638 residents of 169 households in the cross-sectional surveys and 66% among 165 residents of 29 households followed longitudinally every other month. The prevalence of malaria was higher in children 5 to 16 years of age (64%) compared with children younger than five years of age (38%) and adults older than 16 years of age (22%). The prevalence of malaria was 21% by microscopy in the cross-sectional surveys.

Conclusion: Nchelenge District continues to have a high burden of malaria despite malaria control interventions. This is higher than the national average. Efforts are being made to understand the main determinant of malaria prevalence in Nchelenge

<http://dx.doi.org/10.1016/j.ijid.2014.03.657>

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A study on short duration fever in a tertiary care centre in Kolkata, India



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Background: Aetiology of short duration fever varies according to the population characteristics, geographical area and season. Generation of region specific data is needed.

Methods & Materials: From July 2011 to June 2012, 200 adults and adolescents >14 years of age presenting with fever (>99 degree F) of less than two weeks duration at School of Tropical Medicine, Kolkata were studied excluding patients with HIV infection, haematological malignancies and on immunosuppressive therapy.

Detailed history and thorough clinical examination was done. Laboratory investigations were undertaken as appropriate for the clinical presentation using a syndromic approach. Patients were managed according to National Guidelines.

Results: Aetiology was identified in 193 cases. Chikungunya was the commonest cause affecting 44% of study population (55%-female). Most patients were 31–40 years of age. Arthralgia and rash were found in 94.3% and 80.7%. Pattern of joint involvement was small-28%, large -11% and both-61%. Malaria occurred in 15.5% of subjects(67.7% male), no age preference was seen. 22 had *P.vivax* and 9 *P.falciparum*. Splenomegaly was commoner with *P.vivax*. One had complicated falciparum malaria. Dengue was found in 10% cases (60% male). Most patients were between 31–40 years of age. Rash, myalgia, arthralgia and diarrhoea were observed in 19, 17, 11 and 3. Findings included purpura in 4, epistaxis, hypotension, signs of plasma leakage each in 2 cases. 2 patients had Dengue and Chikungunya coinfection. UTI occurred in 12% cases (75%-females). Organisms were *E.coli* -75%, *Klebsiella* - 17% and enterococci - 8%. 37.5% of UTI were caused by ESBL producers. Respiratory tract infection occurred in 8.5% (53% male), organisms being *S.pneumoniae*-83%, *K.pneumoniae*-12%, *H.influenzae*-5%. In both UTI and RTI, incidence increased with age. Enteric fever was diagnosed in 5.5% cases (63% male). Leptospirosis was diagnosed in two male patients. 7 cases remained undiagnosed despite meticulous search.



Picture 1. Rash in Chikungunya

Conclusion: The ongoing epidemics of Chikungunya and Dengue were reflected in the results. Malaria is still an important problem. Other common causes like UTI, RTI and enteric fever were observed. Females were affected more by Chikungunya and UTI while males suffered more from Malaria, Dengue and RTI. Occur-