

0108

KENYAN VILLAGE CHILDREN AFFECTED BY BACTERIAL MENINGITIS

G Nyabade* Correspondence: Go Fishnet Youth Project, PO Box 2482 Kisumu 40100, Kenya

10.1136/ip.2010.029215.108

Objective Kenyan village children are casualties to bacterial meningitis. Early diagnosis and appropriate antibiotic treatment are perhaps the most important initiatives towards eradication of this great pandemic and its management in Kenyas rural villages. The objective of this study indicates and brings to awareness that bacterial meningitis kills many children from poor and desperate Kenyan villages without access to hospitals or clinics.

Methods Nyando Sub District Hospital, serving 300 000 people in a rural, malaria-pandemic area of the Western Kenyan, was studied. A Kenya Medical Research Institute research centre is located at Kisian near Kisumu city. All paediatric admissions aged 60 days between June 2001 and July 2002 were eligible.

Results A total of 91(2.0%) of 4582 admissions had meningitis, including 77(4.0%) of 1929 of those who met the IMCI referral criteria for meningitis at admission (sensitivity: 85%; specificity: 59%). Independent indicators of the presence of meningitis were a bulging fontanel, neck stiffness, cyanosis, impaired consciousness, partial seizures and seizures outside the febrile convulsions age range. The area under the receiver operating characteristic curve for a set of simple screening rules based on the positive indicators identified was 0.88(95% CI 0.85 to 0.92).

Conclusions The presence of one of a bulging fontanel, neck stiffness, cyanosis, impaired consciousness, partial seizures and seizures outside the febrile convulsions age range is a clear indication for lumbar puncture and/or presumptive treatment.