

ABSTRACT

OBJECTIVE:

We conducted a community survey to estimate the prevalence and describe the features, risk factors, and consequences of convulsive status epilepticus (CSE) among people with active convulsive epilepsy (ACE) identified in a multisite survey in Africa.

METHODS:

We obtained clinical histories of CSE and neurologic examination data among 1,196 people with ACE identified from a population of 379,166 people in 3 sites: Agincourt, South Africa; Iganga-Mayuge, Uganda; and Kilifi, Kenya. We performed serologic assessment for the presence of antibodies to parasitic infections and HIV and determined adherence to antiepileptic drugs. Consequences of CSE were assessed using a questionnaire. Logistic regression was used to identify risk factors.

RESULTS:

The adjusted prevalence of CSE in ACE among the general population across the 3 sites was 2.3 per 1,000, and differed with site ($p < 0.0001$). Over half (55%) of CSE occurred in febrile illnesses and focal seizures were present in 61%. Risk factors for CSE in ACE were neurologic impairments, acute encephalopathy, previous hospitalization, and presence of antibody titers to falciparum malaria and HIV; these differed across sites. Burns (15%), lack of education (49%), being single (77%), and unemployment (78%) were common in CSE; these differed across the 3 sites. Nine percent with and 10% without CSE died.

CONCLUSIONS:

CSE is common in people with ACE in Africa; most occurs with febrile illnesses, is untreated, and has focal features suggesting preventable risk factors. Effective prevention and the management of infections and neurologic impairments may reduce the burden of CSE in ACE.