FACTORS ASSOCIATED WITH RECURRENCE OF PLAGUE IN ENDEMIC VILLAGES IN VURRA COUNTY, ARUA DISTRICT

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ABSTRACT

Background

Plague epidemics have continued to occur in West Nile in Uganda an area with persistent wild rodent infection. The study was conducted to determine the factors associated with plague endemicity in Vurra County, Arua district to enable the district and other partners design appropriate control strategies.

Methodology

This was a case control study that was conducted among 91 households heads from villages that had reported plague and 91 household heads that had no plague reported in Vurra County. Cases were considered as heads of households in villages that had ever reported a case of human plague while controls were heads of households in villages that had never reported a case of human plague from 2009 to 2013. An interviewer administered questionnaire, focus group discussions and key informant interviews were conducted to get information about the outbreak situation in the district. Trends of plague were calculated using data from DHIS and multiple logistics regression was used to identify the factors associated with plague endemicity in Vurra County.

Results

Slightly over one half (54%) of the respondents were females, 68%were Catholics (), 54% had attained primary education (), 67% were married, 49% were farmers and the median age was 29 years. Respondents from case villages were less likely to stay in houses whose windows and ventilators which were protected by a wire mesh compared to those from control villages (AOR = 0.4; 95% CI: 0.2 - 0.7).

Conclusion

The unprotected windows and ventilators could have facilitated entry of flea infested rodents contributing to persistent plague outbreaks. Measures to shield windows and ventilators should be adopted to control the outbreaks.