3rd International Conference on
Influenza Research and Emerging Infectious Diseases
April 10-11, 2019 | Toronto, Canada

ACCEPTED ABSTRACT JOURNAL OF CLINICAL & CELLULAR IMMUNOLOGY 2019, VOLUME 10 | DOI: 10.4172/2155-9899-C2-070

Socio-demographic and exposure factors associated with confirmed cases of monkeypox infection in Bayelsa State, Nigeria, 2017

Samuel Owoicho
Niger Delta University Teaching Hospital, Nigeria

Background: An outbreak of Monkeypox, a rare viral zoonotic disease caused by an *Orthopoxvirus*, was reported in Bayelsa on September 22, 2017. We investigated the outbreak to characterize the cases and determine associated factors.

Methods: We reviewed hospital records of Yenagoa and Ogbia Local Government Area for suspected or confirmed cases at Niger Delta University Teaching hospital (NDUTH) and extracted data on socio-demography and clinical features. We conducted an unmatched case-control study from September 25 to November 8, 2017. We defined a confirmed case as any person presenting with a history of sudden onset of fever, vesiculopustular rash occurring mostly on the face, palms, and soles of the feet with laboratory confirmation of monkeypox virus (any of a positive IgM antibody, PCR or virus isolation). Controls were healthy family members and neighbors randomly selected. All 10-confirmed cases and 80 controls were recruited. A bivariate analysis was performed to determine associated factors, using Fisher's exact test, and $p<0.05$ was considered significant. We also carried out an environmental assessment for the houses of cases.

Results: The median age of the cases was 28.5 years (Range: 6-43 years), while that of the controls was 31 years (Range: 16-68 years). One of the cases committed suicide on admission at NDUTH. About 80% of the cases were male and single. Being single (OR=7.6; 95% CI: 1.4–76.1) and attending churches and burial ceremonies (OR: 0.02; 95% CI: 0.01–0.86) were associated with the risk of developing monkeypox infection. All cases and 26 (86.7%) controls were found to be living in rodent-infested houses.

Conclusion: Being single and attending churches and burial ceremonies were found to be risk factors in acquiring monkeypox. Public awareness on avoidance of body contacts during social gatherings and strict environmental sanitation were recommended.

samuelowoicho52@gmail.com