

Type: Poster Presentation

Final Abstract Number: 53.026

Session: Infectious Disease Surveillance II

Date: Friday, April 4, 2014

Time: 12:45–14:15

Room: Ballroom

Analysis of Measles Surveillance data in District Larkano, Sindh, Pakistan 2012J.A. Khan^{1,*}, J. ansari², A. Ghanghro³¹ FELTP- Alumni, MOH, Islamabad, Sindh, Pakistan., Hyderabad, Pakistan² Public Health Division, National Institute of Health, Islamabad, Pakistan³ FELTP- alumni, Islamabad, Sindh, Pakistan

Background: On annual report of District surveillance data having high measles burden by the year 2012. Epidemic Investigation Cell of Directorate General Health Hyderabad shared the report to EPI Sindh and make recommendations for future strategies.

Methods & Materials: 1st January 2012 to 31st December 2012 available surveillance data sets and clinical notes were analyzed. WHO case definitions for measles followed any person in whom a clinician suspects measles infection or any person with fever and maculopapular rash and cough, coryza or conjunctivitis while Presence of measles-specific IgM antibodies are laboratory confirmed.

Results: Out of a total 738 cases out of them 274 cases were laboratory confirmed. Male were 51% while Female were 49% and the ages were varies between 05 months to 264 months and the mean age of cases was 3.2 years. 70% cases were either unvaccinated or incompletely vaccinated. Twenty four deaths (Case Fatality Rate = 3%) reported due to post measles complications including 317 pneumonia and 64 encephalitis. 187 (25%) cases were hospitalized. The trend shows that the peak number of reported cases was reached in December (n = 144).

The highest number of cases were reported from Larkana taluka which accounted for 59% of cases (n = 437).

Conclusion: District has poor routine measles immunization coverage, we recommended to conduct supplementary immunization activities throughout the district and permanent involvement of lady health workers program in routine immunization.

<http://dx.doi.org/10.1016/j.ijid.2014.03.985>

Type: Poster Presentation

Final Abstract Number: 53.027

Session: Infectious Disease Surveillance II

Date: Friday, April 4, 2014

Time: 12:45–14:15

Room: Ballroom

Inconclusive sera for HIV in Central Africa are associated with malaria and EBV infectionF.-X. Mbopi-Keou^{1,*}, F. Talla², G.C.M. Kalla³, H. Pére⁴, M. Matta⁴, L. Bélec⁵¹ Ministry of Health & University of Yaounde I, Yaounde, Cameroon² Litto Labo, Douala, Cameroon³ University Teaching Hospital, Yaounde, Cameroon⁴ Laboratoire de virologie, hôpital Européen Georges Pompidou, Paris, France⁵ University Rene D'Escartes & Georges Pompidou University Hospital, Paris, France

Background: "Inconclusive" sera when subjected to the conventional screening strategies for the human immunodeficiency virus (HIV) are particularly frequent in Central Africa. Herein we report on evaluation of whether inconclusive sera from Cameroon could be associated with active infection by CMV, HHV-6, EBV, or *Plasmodium spp.*

Methods & Materials: 464 sera and dried blood spots (DBS) were consecutively collected. The sera were tested in parallel by 6 commercially available serological tests for HIV. PCR for HIV-1, CMV, HHV-6, EBV and *Plasmodium spp* were further carried out on DBS-extracted DNA from all indeterminate or all HIV-positive sera, and 1 of every 5 randomly selected HIV-negative sera.

Results: 56 (12.1%) of the sera were inconclusive. All inconclusive sera were negative for HIV-1 cDNA. 8.9% of inconclusive sera were positive for CMV DNA, whereas 9.9% and 15.3% HIV-negative and HIV-positive sera, respectively, were positive ($P > 0.05$). Only one (3.8%) HIV-positive serum was positive for HHV-6 DNA. 17.8% of inconclusive sera were positive for EBV DNA, whereas only 2.9% and 11.5% of HIV-negative and HIV-positive sera, respectively, were positive ($P < 0.03$). 42.8% of inconclusive sera were positive for *Plasmodium spp* DNA, whereas only 2.9% and 7.6% of HIV-negative and HIV-positive and sera, respectively, were positive ($P < 0.01$). Nine of 10 (90%) of EBV-positive DBS from inconclusive sera versus only 2 of 11 (18%) of EBV-positive DBS from HIV-negative sera were also positive for *Plasmodium spp* ($P < 0.01$). Finally, 25 of 56 (44.6%) inconclusive sera were associated with positivity for either *Plasmodium spp* or EBV, against only 20 of 382 (5.2%) and 5 of 26 (19.2%) HIV-negative and HIV-positive sera, respectively ($P < 0.01$).

Conclusion: The present study demonstrates that inconclusive cases may be frequently associated with malaria and/or EBV infection. Other factors like the genetically controlled production of natural antibodies against HIV antigens also need to be further investigated.

<http://dx.doi.org/10.1016/j.ijid.2014.03.986>