

# International Conference on **Influenza**

August 24-26, 2015 London, UK

## Co-infection of malaria and influenza viruses in Uganda: A pilot study

**B Namagambo, J T Kayiwa, T Byaruhanga, R Chiza, N Owor, N Babi, I Nabukenya, B Bakamutumaho and J J Lutwama**  
NIC-Uganda Virus Research Institute, Uganda

**Background:** Influenza is a highly contagious viral infection of the respiratory passages causing fever, headache, severe aching, cough, and periodically causes epidemics especially in temperate environments. In many African countries, people do not visit clinics or hospitals with just influenza infection. Majority of ILI patients do not seek medical care and very few of those who do, get tested for influenza. The many of influenza cases that are reported by surveillance programs are from sentinel sites where patients come in with other medical problems. Clinically, influenza is not distinguishable from most other infectious diseases with fever in the tropics. Malaria is an important infectious disease and is still thought to be the main cause of febrile episodes. Most fevers are thought to be malaria. Our investigations sort to establish information on incidence of malaria in patients who are positive with Influenza infection.

**Methods & Materials:** This cross-sectional pilot study examined incidence of malaria among outpatient visits and hospitalizations associated with Influenza like Illnesses (ILI) and Severe Acute Respiratory Illness (SARI) during the period February 2011-November 2013 in children, youth and adults attending six health facilities of; Kawaala health centre II, Kitebi Health centre III, UVRI Clinic, Entebbe Hospital and Mbarara Regional referral hospital in Uganda. Nasopharyngeal and oralpharyngeal swabs were collected from patients meeting the WHO case definition for ILI and SARI. Influenza viruses were screened for using RT-PCR and the clinical data presenting diagnosis of malaria was collected and analyzed.

**Results:** Out of the 1020 specimens collected from influenza cases; 754 (73.9%) were from patients diagnosed with malaria; 116 (15%) of 754 were tested positive for Influenza and 638 (84.6%) were negative; positive for Influenza A were 71(9.4%) with two subtypes; 56(7.4%) A(H3) and 15(2.6%) Pandemic A(H1N1) 2009, and 45 (6.0%) were Influenza B viruses . Of the 116 positives 108(93.1%) were ILI and 8(6.9%) were SARI patients. Although 107 (92.2%) Children diagnosed with Malaria had Influenza, 9 (7.8%) Youth had Influenza whereas there was no Influenza in Adult.

**Conclusion:** Our data shows a high incidence of Influenza in children diagnosed with malaria.

### Biography

B Namagambo is a student from Uganda Virus Research Institute - National Influenza Centre (UVRI-NIC), Uganda.

[barb.namax@gmail.com](mailto:barb.namax@gmail.com)

### Notes: