ONICSCOUP <u>C o n f e r e n c e s</u> <u>Accelerating Scientific Discovery</u> 2nd International Conference on **Clinical Microbiology & Microbial Genomics**

September 16-17, 2013 Hampton Inn Tropicana, Las Vegas, NV, USA

High level of drug resistant Mycobacterium tuberculosis in tertiary hospital Nnewi, Nigeria

Uzoewulu N. G Nnamdi Azikiwe University Teaching Hospital Nnewi, Nigeria

Objective: Drug resistant *Mycobacterium tuberculosis* is a public health threat globally. We described the drug resistance pattern of *M. tuberculosis* to first line anti-TB drugs and the frequency of MDR-TB among TB patients at NAUTH Nnewi Nigeria.

Methods: Sputum specimens from 550 suspected new and previously treated TB patients were analyzed for AFB. Positive sputum samples were cultured on Lowenstein-Jensen medium and confirmed *Mycobacterium tuberculosis* isolated were subjected to drug susceptibility testing to Streptomycin, Isoniazid, Rifampicin and Ethambutol.

Result: Sputum culture yielded 180 (32.7%) culture positive samples out of 550 patients examined. Ninety-seven (53.8%) were susceptible to all first line anti-TB drugs while 83 (46.1%) were drug resistant TB. Three patterns of drug resistance were observed, Mono-drug resistant in 34 (18.8%) patients, with the highest proportion of resistance observed for isoniazid 12 (6.6%) and lowest drug resistance observed for rifampicin 5 (2.7%), Multi-drug resistant in 14 (7.7%) patients with higher rate in previously treated 8 (4.4%) compared to new TB patients 6 (3.3%) and Poly-drug resistant in 35 (19.4%) patients. Fifty- six (31.1%) were new TB cases and 27 (15%) were previously treated TB cases within the age range of 21-35 years. No association was detected between the drug resistant strains and HIV 14 (7.7%) status of TB patients. No different in the rate of MDR-TB and patients sex (P=0.05). **Conclusion:** The rate of MDR-TB (resistance to rifampicin and isoniazid only) is high in the community studied. Larger studies are urgently recommended to improve TB clinical management and control efforts.

Biography

Uzoewulu N. G. obtained Ph.D. in Medical Microbiology in 2012 at 39 years from University Benin Edo State Nigeria. Dr. Uzoewulu is presently working in Nnamdi Azikiwe University Teaching Hospital as a Senior Medical Scientist.

gerttyn@yahoo.com