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Bacterial pathogens of lower respiratory tract in University of Ilorin Teaching Hospital, Nigeria

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This study investigated the bacterial pathogens of lower respiratory tract (LRTI), as well as the susceptibility pattern of the bacterial strains isolated in University of Ilorin Teaching Hospital (UITH) Ilorin, Nigeria. The study was carried out during December 2013 and February 2014. Sputum specimens were collected from patients and cultured on Blood agar, Chocolate agar and MacConkey agar media. Bacterial isolates were identified by Gram staining and biochemical tests. Antimicrobial susceptibility test was performed according to Clinical and Laboratory Standard Institute (CLSI) guidelines. Out of 103 sputum specimens studied, 16 bacterial species were isolated, giving the overall prevalence of 15.53%. This consisted of 62.50% from male patients and 37.50% from female patients. The bacteria isolated include *Klebsiella pneumoniae* (81.25%), *Pseudomonas aeruginosa* (12.50%) and *Klebsiella oxytoca* (6.25%) in order of ranking. 13 (81.25%) isolates were 92.31% susceptible to Ceftriaxone, Gentamycin, Cefuroxime and Ceftazidine and 15 (93.75%) isolates were 87.2% susceptible to Gentamycin, Ceftazidine and Piperacillin. *Klebsiella pneumoniae* was the most susceptible amongst the isolates. *Klebsiella oxytoca* displayed the highest number of resistance (83.3%) to most of the antibiotics tested except Augumentin in which, it was moderately resistant. In conclusion, *Klebsiella pneumoniae* was the most commonly recovered organism from patients with lower respiratory tract infection in this centre. Resistance to all tested antibiotics by *Klebsiella oxytoca* as recorded in this study is of clinical significance with associated possible treatment failure. On the other hand, Ceftriaxone, Gentamycin, Cefuroxime and Ceftazidine remain useful agents in the management of LRTI in this environment if *Klebsiella oxytoca* is excluded.

Biography

Zaharaddin Muhammad Kalgo has completed his MSc degree from University of Ilorin, Ilorin, Nigeria. He is currently a Lecturer at the Federal University Birnin Kebbi, Kebbi State, Nigeria. He has strong interest in medical research and biotechnology.

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