

JOINT EVENT

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Proteomics and Molecular Medicine

9<sup>th</sup> International Conference on

Bioinformatics

&amp;

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**First report of Colistin Resistance (*MCR-1*) Gene in *Escherichia coli* and *Klebsiella pneumoniae* Isolated from Clinical Specimens in Khartoum, Sudan**Nahed Adam<sup>1</sup> and Hisham N Altayb<sup>2</sup><sup>1</sup>Sudan University of Science and Technology, Sudan<sup>2</sup>The National University, Sudan

The aim of this study was to detect the presence of *mcr-1* gene in clinical isolates of *Enterobacteriaceae* in Khartoum State, Sudan, at the period between February and July 2016 using 50 consecutive clinical *Enterobacteriaceae* isolates. Species was identified using standard biochemical tests. Antimicrobial susceptibility was done by using the following antibiotics; ciprofloxacin, gentamicin, co-trimoxazole, cefotaxime, cefuroxime and cefixime. DNA was extracted by using bacterial genomic extraction Kits. For the entire isolated organism, PCR was done to detect *mcr-1* by using specific primer. The most commonly isolated organism was *E. coli* 38 (76%), followed by *Proteus spp.* 8 (16%), and *K. pneumoniae* 4 (8%). Males (60%) are more infected than females (40%), and elderly patients 61-90 years (42%) are found to be more susceptible to infection. We also reported highly resistant rate to ciprofloxacin (66%), gentamicin (68%) and cefuroxime (96%). *mcr-1* gene was detected in 7 (14%) isolates, mostly in *E. coli*. We reported for the first time in Sudan the presence of *mcr-1* gene in clinical isolates, and the prevalence of this gene is higher when compared to other countries.

**Biography**

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