

Multi-Drug Resistant Salmonella Typhi among Outpatients in Hospitals within Ilorin and their susceptibility to extracts of Cymbopogon Citratus

Anibijuwon I. Ibikunle

University of Ilorin, Nigeria

Abstract

Statement of the Problem: Misuse of drugs, medication non-adherence among other factors, has led to the emergence of multi-drug resistant *Salmonella typhi*, which is a major threat because enteric fever could be fatal if improperly treated.

Theoretical Orientation: A cross-sectional survey was performed on 400 blood samples from out-patients in Children Specialist Hospital, Cottage Hospital, Adewole Specialist Hospital, and Civil Service Hospital, Ilorin over a period of five-month. The susceptibility of *Salmonella typhi* to antibiotics and plant extract of *Cymbopogon citratus* were also done.

Findings: Eight *Salmonella typhi* isolates were recovered from the patients. All the isolates were multi-drug resistant with a notable resistance to chloramphenicol, ampicillin and co-trimoxazole. Molecular confirmation of the isolates showed DNA size of 500 base pairs. The most active extract was the ethanolic extract with MIC exhibited at 12.5mg/ml and MBC 25mg/ml. Phytochemical screening of the plants revealed the presence of alkaloids, flavonoids, phenols, tannins, saponins, steroids and glycosides that may be responsible for their antibacterial actions.

Conclusion & Significance: The plant can be used to develop new drugs. The occurrence of typhoid fever is a major threat to the general public, antimicrobial resistance surveillance is recommendable for early detection of typhoid fever



Biography:

Anibijuwon is a Senior lecturer at the Department of Microbiology, University of Ilorin, Nigeria. He is specialized in Medical microbiology and Public health. His research interests are antimicrobial resistance, infectious diseases, and antimicrobial activities of natural products. He is a member of

the Nigerian Society of Microbiology and American Society of Microbiology. Dr. Anibijuwon has more than 10 years teaching and research experience in the field of Microbiology. He has published few articles in National and International research journals

Speaker Publications:

1. Anibijuwon, I.I., Gbala, I.D. & Abioye J. A (2018): Susceptibility of Selected Multi-Drug Resistant Clinical Isolates to Leaves of *Carpolobia lutea*. Ethiopian Journal of Health Sciences Vol. 28, No 2 (2018): Published by Jimma University of Ethiopia
2. Anibijuwon, I.I., Gbala, I.D. & Nnadozie, I. B. and Ifayefunmi O.O. (2018): Susceptibility of Selected Multi-Drug Resistant Clinical Isolates to Leaves of *Senna alata*. *Notulae Scientia Biologicae*. 10(1); 26-32, Published by Faculty of Agriculture, University of Romania



18th [International Conference on Pharmaceutical Microbiology and Biotechnology](#); Webinar - September 28-29, 2020

Abstract Citation:

Anibijuwon I. Ibikunle, Multi-Drug Resistant *Salmonella Typhi* among Outpatients in Hospitals within Ilorin and their susceptibility to extracts of *Cymbopogon Citratus*, *Pharmaceutical Microbiology* 2020, 18th International Conference on Pharmaceutical Microbiology and Biotechnology; Webinar - September 28-29, 2020.

(<https://pharmaceuticalmicrobiology.microbiologyconferences.com/abstract/2020/multi-drug-resistant-salmonella-typhi-among-outpatients-in-hospitals-within-ilorin-and-their-susceptibility-to-extracts-of-cymbopogon-citratus>)