



Biorisk assessment and antibiotic susceptibility profile of bacteria isolated from toys of children in kaduna metropolis

Igwe JC^{1*}, Parom SK¹, Obajuluwa AF¹, Durowaiye MT² and Kuzayet DJ¹ Kaduna State University, Kaduna State, Nigeria



Abstract

Toys are vital tools for children mental and physical development, as they have the potential to teach, create positive roles in children education, social, emotional and physical development. However, it could serve as route of transmission of diseases to children due to microbial ability to produce virulent characteristics and develop resistance to commonly used antibiotics; resulting to financial losses, organ failure, drug toxicity, over administration, and in some cases death. Hence, this study x-rayed the microbial profile of Toys in Hospitals, Schools, Orphanages, and Day Care Centers in Kaduna Metropolis and their susceptibility to commonly used antibiotics. Sample collection, microbial analysis and antibiotic susceptibility profile were carried out using standard microbiological methods. The total colony count ranged from 1.1x106 – 7.5x106CFU/ml. A total of 66 bacteria isolates were recovered from the 60 samples collected. The most prevalent bacteria identified were Staphylococcus spp (22.65%), Streptococcuss spp. (22.65%), Salmonella spp. (18.18%), Bacillus spp (15.15%), Klebsiella spp (7.6%), E. coli (7.6%) and Proteus spp (6.10%).

Biography

Igwe JC works in the Department of Medical Biotechnology, National Biotechnology Development Agency, Abuja, Nigeria. He is serving as an editorial member and reviewer of several international reputed journals. He has successfully completed his Administrative responsibilities. He has authored of many research articles/books related to Animal science.



23rd Global Biotechnology Congress | November 26, 2021

Citation: Igwe JC, <u>Biorisk assessment and antibiotic susceptibility profile of bacteria isolated from toys of children in kaduna metropolis, Global Biotechnology 2022, 23rd Global Biotechnology Congress | November 26, 2021,03</u>