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Antimicrobial Resistance and Drug Discovery

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Dear Editor,

This article is conferred about antimicrobial resistance and need of drug discovery. In our various earlier research, we have focused on the isolation, purification and characterization of new antimicrobial compounds from microbial sources. As we all know that an international threat to health and development is Antimicrobial Resistance (AMR). To attain the Sustainable Development Goals (SDGs), urgent multisector act is needed. Antimicrobial resistance is one of the top 10 worldwide public health hazards to humanity. Drug-resistant infections are mostly brought on by the improper use and overuse of antibiotics. The proliferation of bacteria, some of which may be resistant to antibiotic therapy, is encouraged by a lack of clean water, proper sanitation, and effective infection prevention and control. The economic burden of AMR is substantial. Long-term disease not only increases the risk of mortality and incapacity but also elongates hospital stays, necessitates the use of more expensive medications, and puts a burden on the finances of those affected. Without efficient antimicrobials, infections would be more difficult to treat in modern medicine, notably during major surgery and cancer chemotherapy. *Streptomyces* sp. has been great source of antimicrobial compounds and still various strains needs to be explored from scientists. In our previous study we have discovered various strains of *Streptomyces* producing novel antibacterial and antifungal compounds from unexplored region of Chhattisgarh [1-5]. Authors have isolated and purified active metabolites which were found to be active against various human pathogens [6]. Further authors suggested to conduct extensive screening programme for the isolation of antimicrobial producing cultures of *Streptomyces* to discover new antimicrobial compounds from unexplored region of Chhattisgarh and screening out them against various multiple drug resistance pathogens for the public health wellness.

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