

Antimicrobials, Multiple Drug Resistance & Antibiotics Resistance

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Study of the effect of mobile phone radiation (non-ionizing radiation) on antibiotic sensitivity in micro organisms

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Mobile phone radiation exposure for long term is harmful to human beings and other living system. Nowadays antibiotic resistance is the common tragedy in our modern allopathic treatment especially in the case of Tuberculosis. This study was based on the effect of mobile phone radiation on the antibiotic sensitivity in *Escherichia coli*. The difference in sensitivity of *E. coli* that exposed to mobile phone radiation were studied. The mechanism of resistance of these pathogenic bacteria has to be found out as soon as possible for improved patient care. This study may be repeated with other type of microorganisms, both Gram positive and Gram negative with other antibiotics for further investigations. This study has found that, such radio frequency radiation exposed *E. coli* shows decreased sensitivity than other non-radiated *E. coli* towards Gentamycin. Anyway, this topic helps to take preventive measures to withstand our healthy living system and it is the gateway to conclude the relationships and changes of microorganisms due to our natural environmental electromagnetic fields. This study throws light in to resistance developed by microorganisms to normally used antibiotics. This research indicates that, the organisms achieve resistance not only due to the numerous commonly known reasons, patient's noncompliance, etc., but also due to in vitro exposure of RF waves. Now, our world has been surrounded by numerous mobile phone towers and this may cause serious health problems. All of them may know about some hazardous effects of mobile tower and mobile phone radiation but not known about this effects on drugs through microorganisms. Due to the single cell structure, the microorganisms absorb radiation through their entire surface, which were surrounded by mobile tower radiation. When a healthy individual infected with microorganisms which has previously developed resistance or any change in susceptibility from its environment, it may cause failure to response of the individual to the normally used drugs or its dose. On the basis of this study, further research should be necessary about the hazardous effects of the mobile phone radiation to the pathogenic Gram positive and Gram negative bacteria, virus and fungus. Then only this study will achieve the success in protection of human health

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