ASSESSMENT OF THE EXPOSURE OF RADIO FREQUENCY RADIATION FROM WI-FI ROUTERS IN CALABAR METROPOLIS, NIGERIA

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ABSTRACT

This study measured the radio frequency of non-ionizing radiation from Wi-Fi routers by varying the distance between 0.5 m to 3 m using electrosmog meter. The results revealed that the highest amount of radiations of 1.600 V/m, 1.569 V/m, 1.450 V/m, 1.346 V/m, 1.237 V/m, 0.994 V/m and 0.578 V/m were observed at a distance of 0.5 m in all the sample locations. In all cases, the measured radiations were very far below the exposure limits set by International Commission on Non- Ionizing Radiation Protection. Short term exposure did not produce health effect, however, staying close to the source of radiation, strength of the electromagnetic field generated and long term exposure can be dangerous to health.

Keywords: Exposure, non-ionizing radiation, radio frequency, Wi-Fi router
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