

ABSTRACT NO.: 529

TITLE: The Effects of Radiofrequency Radiation on Children

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The mobile phone is possibly the most commonly used wireless communication device in the world today. The phenomenal increase in the use of mobile phones has prompted research, analysis and evaluation to determine whether such radiation emitted by the mobile phones is harmful to children. A review was done on 24 research papers between 2004 and 2008. A critical analysis of each paper was performed and categorized according to its relation to radiofrequency radiation effects on children. Each article focus on different aspects of radiation effects such as Specific Absorption Rate (SAR) values, dosimetric analysis, radiofrequency (RF) exposure, cancer, epidemiological studies and evaluation of mobile phone used based on surveys (population-based studies). Based on the results, approximately 75% of the findings showed that the SAR value was below 1.6W kg^{-1} which illustrates that there were no thermal effects. It can be concluded that, even though radiation can be harmful, there was not sufficient evidence to prove that the radiation emitted by mobile phones have any damaging effects on the brains of children.