

Mobile Phone Users: Another High Health Risk Group

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KEYWORDS Cellular/Cell Phone. Microwaves. Specific Absorption Rate

ABSTRACT The mobile (cellular/cell) phone combines the technology of the wireless communication with that of the telephone and uses specific frequencies called microwaves, a subset of radio waves with frequencies ranging from 300 MHz to 3GHz. Cellular phones and their base stations emit pulsed microwaves in the environment with phone users exposed in the near-field and the general population exposed under far-field conditions. Some reported biological effects associated with these radiations include radiofrequency sickness, electroencephalographic and blood pressure changes, cancer risks and genotoxicity. A survey of persons using mobile phones was conducted in order to gather data on mobile phone usage patterns, which were maintained on a pre-designed questionnaire. There were 91 males and 9 females (16-55 yrs) of which 76 belonged to upper middle class socio economic status. They worked as businessmen, teachers, bank employees, doctors, surveyors, sales executives, mechanics, medical representatives and some of them were students. The duration of phone use varied from 1-5 yrs, with daily use of phone from 1-18 hr. They mostly kept the phones in their pockets while on move or on the table when in office or when at home. Some users complained of sleeplessness, headaches, memory loss, loss of attention and heating sensation on mobile phone use. Since exposure to radiofrequency radiations has been reported to affect physiological, neurological, cognitive and behavioural changes and to induce, initiate and promote carcinogenesis, such an underlying threat to human health also exists for mobile phone users.