



Effects of Radiation from Mobile Towers on Human Health

• Suprabha Dey • Sefalika Roy • Deepa Kiran
• Shahla Yasmin

Received : November 2012
Accepted : March 2013
Corresponding Author : Shahla Yasmin

Abstract : *The possible effects of radiation from mobile towers on human health was studied. A survey based on distance from towers, number of cell phone tower in the vicinity of house, age of exposed group, duration of conversation over cell phone was undertaken to see the possible adverse effects of microwave radiation from mobile towers on human health. It was found that neither the proximity to mobile towers, nor the duration of mobile phone had any adverse effect on health. However, haematological analysis showed slightly lowered but statistically insignificant lymphocyte count in the human subjects living at a distance <100 m from mobile towers as compared to those living away from mobile towers.*

Key Words : *Mobile tower, radiation, human health.*

Suprabha Dey

B.Sc. III year, Zoology (Hons.),
Session : 2010-2013, Patna Women's College,
Patna University, Patna, Bihar, India

Sefalika Roy

B.Sc. III year, Zoology (Hons.),
Session : 2010-2013, Patna Women's College,
Patna University, Patna, Bihar, India

Deepa Kiran

B.Sc. III year, Zoology (Hons.),
Session : 2010-2013, Patna Women's College,
Patna University, Patna, Bihar, India

Shahla Yasmin

Head, Dept. of Zoology, Patna Women's College,
Bailey Road, Patna-800 001, Bihar, India
E-mail : shahla_apex@yahoo.co.in

Introduction :

Cell phone technology has revolutionized the telecommunication scenario in India. Cell tower antenna transmit EM radiations in the frequency range of 864-894 MHz (CDMA), 935-960 MHz (GSM 900) and 1810-1880 (GSM 1800). Chronic exposures to such frequencies can be dangerous and can lead to many health related problems. These radiations also reduce the competence of the immune system. More young people are experiencing early death as a result of exposure to radiation (Santini et al 2002; Kumar 2010).

A large number of mobile phone base stations are being installed in the residential areas of Patna. So there is a need to conduct a study on the health aspects of people residing near these mobile phone base stations. Therefore this study was undertaken to see the possible adverse effect of microwave radiation on people residing near single as well as multiple mobile towers and on the people of different age-groups.

Methods :

A survey was conducted to study the possible harmful effects of mobile tower radiation on human body with the help of questionnaire. Three hundred and three respondents were categorized into two