



Category: Miscellaneous

## Assessment of Health problems and Genetic Damage in Residents of Uppal Industrial Area

Chiliveri Prashanth, Vanitha Baluka and P.P. Reddy

Department of Genetics, Bhagwan Mahavir Medical Research Centre, Hyderabad, INDIA

Presenting author: [chiliveri.prashanth@gmail.com](mailto:chiliveri.prashanth@gmail.com)

### Abstract

Uppal and Patancheruvu are two important industrial zones in twin cities. Since 1980's many industries such as pharmaceutical drugs, paints, pesticides, steel, plastics, textiles, leather, rubber, etc. were established. Many a time complaints of Industrial Pollution from residents of Uppal industry area were received by the government with a request to kindly take necessary step to prevent industrial pollution in this area. Although very few studies were carried out on people living here and hence an attempt was made to take up a large scale study. Epidemiological, genetic, cytogenetic and molecular studies were carried out in subjects living in Uppal industrial area. For comparison the residents of Ameerpet were selected (control group). 560 people residing in and around Uppal Industrial belt were selected for epidemiological studies and for comparison people living in non-industrial area (Ameerpet) and not exposed to either agricultural or industrial chemicals occupationally were selected (Control group). The results showed an increased frequency of health problems when compared to control group. The prominent health problems were hypertension, diabetes, renal problems, skin problems, gastrointestinal disorders, infections, nervous disorders, muscular pain, respiratory disorders, and weakness/lassitude. Reproductive outcome of 175 couples living in this area was studied. The reproductive outcome was assessed by measuring the incidence of abortions, stillbirths, malformations, prenatal deaths, etc. The results showed a decrease in the fertility (87.33% against 88.88% in control group) and a high incidence of abortions (8.41% against 5.09% in control group). Studies on incidence of chromosomal aberrations and sister chromatid exchanges in 60 people living here were taken up and results shown the increased levels of cytogenetic damage when compared to the controls.

**Citation:** Prashanth, C., Baluka, V. and Reddy, P.P. Assessment of Health problems and Genetic Damage in Residents of Uppal Industrial Area [Abstract]. In: Abstracts of the NGBT conference; Oct 02-04, 2017; Bhubaneswar, Odisha, India: Can J biotech, Volume 1, Special Issue, Page 152. <https://doi.org/10.24870/cjb.2017-a138>