

Perceptions and Practices of the Management of E-Waste among the adult Population of Delhi

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Abstract

Introduction: In the last decade, the world has seen a swift upgrade in technologies, be it software or networks. This, in combination with the more than ever-competitive electronic market in India, the general population is exposed to affordable electronic devices available in different ranges. Young adults, in particular, are one of the largest consumers of electronic gadgets in the contemporary world. This has led to frequent changes in gadgets, thus the production of more electronic or E-waste. With no proper plan for waste disposal, our country faces serious environmental and health impacts due to the generation of e-waste. This study aims to assess the level of awareness about the impact of e-waste on health and the environment among the adult population in Delhi.

Material and Methods: A community-based cross-sectional study will be conducted among the adult population in the urban slums of Delhi, Central Delhi, and Gokalpuri over a six-month period. The sample size was calculated to be 308 with the estimated SD as 12.8 (from a previous study), level of alpha error as 0.05, and allowable error for mean as ± 3 . Ethical clearance was sought from the Institutional Ethics Committee.

Results: The study is in progress. Preliminary analysis of 50 participants (27 males, 23 females) showed that all the participants were using mobile phones, while no participants were currently using radio. About 60% of the study participants owned mobile phones for 3 years or more, and the main reason for disposing of the old mobile phone was attributed to battery-related issues. The majority of study participants (80%) had a positive perception of e-waste disposal. Male gender, higher education, and skilled workers were found significantly associated with good knowledge and positive perception toward e-waste management.

Conclusion: There is a need to sensitize the public to the disposal of e-waste practices, ill effects of e-waste, legislation, and laws on e-waste to the population.